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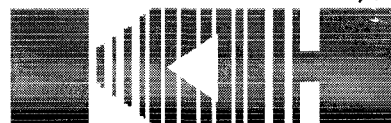
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# Rocky Flats Environmental Technology Site

## BUILDING 865 HIGH BAY DEMOLITION PATH-FORWARD PLAN

REVISION 0

June 5, 2003

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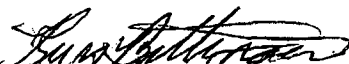
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# BUILDING 865 HIGH BAY DEMOLITION PATH-FORWARD PLAN

## REVISION 0

June 5, 2003

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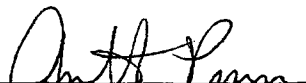


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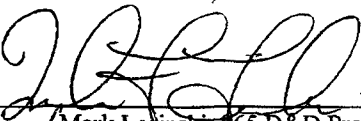


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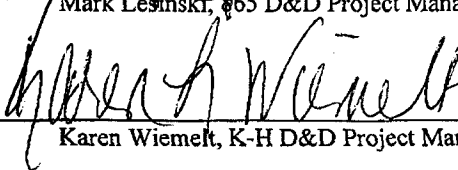


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## **ATTACHMENTS**

- A 865 High Bay Wallboard Photos
- B 865 High Bay Radiological Wall and Ceiling Survey Data
- C 865 High Bay Beryllium Wall and Ceiling Sample Data
- D Tank 207 Demolition Survey Data
  - D-1 Tank 207 Pre-Demolition Rad & Be Survey Data
  - D-2 Tank 207 in-Process Demolition Rad & Be Survey Data
- E 865 High Bay Brokk Demolition Test White Paper
- F Recent 865 High Bay In-process Radiological Floor and Pit Survey Data
- G 865 High Bay Radiological Slab Core Data
- H 980 Pad InstaCote Demolition Test White Paper
- I 865 Building Slab Thickness Drawing

## ABBREVIATIONS/ACRONYMS

ACM	Asbestos Containing Material
Be	Beryllium
CDPHE	Colorado Department of Public Health and the Environment
D&D	Decontamination and Decommissioning
DDCP	Decontamination and Decommissioning Characterization Protocol
DOE	U.S. Department of Energy
DPP	Decommissioning Program Plan
EPA	U.S. Environmental Protection Agency
FDPM	Facility Disposition Program Manual
HSAR	Historical Site Assessment Report
IHSS	Individual Hazardous Substance Site
IWCP	Integrated Work Control Package
K-H	Kaiser-Hill
KHC	Kaiser-Hill Construction
LLW	Low-level waste
NORM	Naturally occurring radioactive material
PDS	Pre-demolition survey
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RFCA	Rocky Flats Cleanup Agreement
RFETS	Rocky Flats Environmental Technology Site
RFFO	Rocky Flats Field Office
RLC	Reconnaissance Level Characterization
RLCR	Reconnaissance Level Characterization Report
RSA	Removable Surface Activity
RSP	Radiological Safety Practices

## 1. INTRODUCTION

The purpose of this Building 865 High Bay Demolitions Path-Forward Plan is to document the steps necessary to safely demolish the 865 Building High Bay after *RFCA RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* have been completed. The proposal assumes that all of the small and large equipment will already be stripped out and removed from the building. Thus, this proposal is applicable to the remaining floor, walls, ceiling, and pits of the 865 High Bay.

The following proposed demolition path-forward steps were derived based on an evaluation of many factors including: worker health and safety risks, protection of the environment, feasibility of success, waste disposal considerations, cost and schedule. Although many factors were considered when determining the best, most practical path-forward, worker health and safety risks and protection of the environment were the two main driving forces in determining this proposed path forward.

Section 3 below lists the basic overall steps for the proposed demolition path-forward. Section 4 below describes each basic step and provides that rationale as to why each step was chosen over the other options, as necessary. In Sections 3 and 4 below, the steps have been subdivided into three groupings: 1) Walls, ceiling & 2nd floor mezzanine, 2) Floors, and 3) Pits.

All of the below work steps can be performed within the framework of RFCA and the current Regulator approved RSOPs. Since the wall, ceiling & 2nd floor mezzanine surfaces will meet the unrestricted release criteria specified in the site *Pre-Demolition Survey Plan* and the *RFETS RSOP for Facility Disposition*, the walls, ceiling & 2nd floor mezzanine can be demolished utilizing the *RFETS RSOP for Facility Disposition*. The proposed demolition path-forward for the floor is to manage the floor as LLW/Be waste. Both the *RFETS RSOP for Facility Disposition* and the *RFETS RSOP for Routine Soil Remediation* discusses and specifies how to demolish and manage contaminated slabs, foundations, and footings. Section 6.6, *Building Foundation and Slab Removal*, of the *RFCA RSOP for Routine Soil Remediation*, specifies that the ER staff will remove the Building 865 slab.

Prior to demolition, a Clean Air Act radiological NESHAP modeling effort would be performed to ensure NESHAP ambient air emissions levels would not be exceeded. Additionally, a 6-point analysis will be performed prior to demolition per *Section 3.8, Removal of Contaminated Portions of the Building Shell* of *RFCA RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities*.

## **2. SCOPE**

This report presents the Building 865 High Bay demolition path-forward plan once the *RFETS RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* are completed. The demolition of the Building 865 Low Bay is also included in this plan. The demolition of the Building 865 walls, ceiling & 2nd floor mezzanine will be performed in accordance with the *RFETS RSOP for Facility Disposition*. Environmental media beneath Building 865 slab is also discussed in this plan and slab and soil will be addressed in accordance with the *RFETS RSOP for Routine Soil Remediation*.

## **3. BASIC STEPS**

### **3.1. Walls, Ceiling & 2nd Floor Mezzanine**

1. Perform a general cleaning of dusty horizontal and vertical surfaces
2. Remove the lower two meters of wallboard
3. Perform radiological PDS of the walls, ceiling & 2nd floor mezzanine
4. Apply CC Fix to wall, ceiling & 2nd floor mezzanine surfaces
5. Perform beryllium PDS of the walls, ceiling & 2nd floor mezzanine
6. Walls, ceiling & 2nd floor mezzanine are now ready for demolition in conjunction with the floor

### **3.2. Floors**

1. Perform a general cleaning of surfaces
2. Perform a modified PDS of floors
3. Apply InstaCote on concrete
4. Demolish 865 High Bay walls, ceiling & 2nd floor mezzanine
5. Remove and manage wall, ceiling & 2nd floor mezzanine debris as sanitary/Be waste
6. Remove and manage floor as LLW/Be waste

### **3.3. Pits**

Currently there are two different potential path-forward options for managing the floor pits in the 865 High Bay. Which path-forward option is chosen will depend on the outcome of the 865 High Bay UBC soil sample results that have yet to be collected. If the UBC soil sample results show that soil remediation is necessary, then Option 1 will be chosen. If the UBC soil sample results show that soil remediation is not necessary, then Option 2 will be chosen. Option 2 will only be undertaken if soil remediation is not required, and decontamination of pits is successful after a reasonable expenditure of time and resources.

#### **Option 1**

1. Perform a general cleaning of dusty surfaces
2. Perform a modified PDS of pits
3. Apply CC Fix on concrete and fill in pits with gravel/soil
4. Demolish pits in conjunction with floors
5. Remove and manage pits as LLW/Be waste

## Option 2

1. Decontaminated pit surfaces below three feet of final grade
2. Perform PDS of pits
3. Protect pit surfaces below three feet of final grade
4. Perform a general cleaning of dusty surfaces above three feet of final grade
5. Apply CC Fix on concrete and fill in pits with gravel/soil
6. Demolish pit surfaces above three feet of final grade in conjunction with floors
7. Remove and manage pit surfaces above three feet of final grade as LLW/Be waste

## 4. DETAILED STEPS – INCLUDING RATIONALE

### 4.1. Walls, Ceiling & 2nd Floor Mezzanine

#### 4.1.1. Perform a General Cleaning of Dusty Horizontal and Vertical Surfaces

A general cleaning of the dusty surfaces of the horizontal and vertical surfaces of the walls, ceiling & 2nd floor mezzanine surfaces will be performed in order to ready the high bay for asbestos clearance surveys as well as gross decontamination of loose beryllium contamination.

#### 4.1.2. Remove the Lower Two Meters of Wallboard

The lower two meters of wallboard will be removed to aid the decontamination of radiological and beryllium contamination, as well as aid in the PDS process. Unlike the upper walls, the lower walls have numerous puncture holes in the wallboard, thus making PDS scan surveys harder to perform. Additionally, the lower wallboard has a higher potential for contamination than the upper wallboard. Therefore, removing the wallboard below two meters was determined to be the safest path-forward. Refer to Attachment A for photos of the wallboard.

In-process characterization of the upper walls has been performed for radiological and beryllium contamination, no radiological contamination (fixed or loose) has been found. Refer to Attachment B for radiological survey results of the wallboard. Two (2) of the 25 High Bay grids were extensively characterized for beryllium, five (5) of the 104 smears were above  $0.2 \text{ ug}/100\text{cm}^2$ , with the highest being  $0.7 \text{ ug}/100\text{cm}^2$ .

Additionally, on one section of the wall, the wallboard was removed from the wall, from ceiling to floor, and characterized behind. All beryllium smears behind the wallboard were  $<0.1 \text{ ug}/100\text{cm}^2$ . Refer to Attachment C for survey results of the wallboard. The wallboard was securely installed during original construction of the building, and there was minimal chance for contamination to migrate behind the wallboard during past operations or D&D work. Removing the wallboard above two meters would require the use of high-reaching man-lifts and numerous man-hours at elevated heights to remove the wallboard. Therefore, leaving the wallboard intact above two meters was determined to be the safest path-forward.

4.1.3. Perform Radiological Pre-Demolition Surveys (PDS) of the Walls, Ceiling & 2nd Floor Mezzanine

A routine radiological PDS of the walls, ceiling & 2nd floor mezzanine will be performed to verify that all wall, ceiling & 2nd floor mezzanine surfaces meet the unrestricted release criteria specified in *the RFCA RSOP for Facility Disposition, Section 4.1, Table 3*. Prior to PDS verify all fixative has been removed.

4.1.4. Apply CC Fix to Wall, Ceiling & 2<sup>nd</sup> Floor Mezzanine Surfaces

CC Fixative (a.k.a. CC Fix) will be applied to all wall, ceiling & 2<sup>nd</sup> floor mezzanine surfaces to fixate in any remaining residual loose beryllium contamination that may be on facility surfaces. Putting workers up on high-reaching man-lifts and spending numerous man-hours at elevated heights to remove low-levels of residual beryllium ( $<1.0 \text{ ug}/100\text{cm}^2$ ) is not worth risk, when a fixative can be easily and safely applied. Actual demolition work has shown that CC Fix is an excellent method to contain loose beryllium contamination and to prevent the spread during demolition work. Both the 207 Tank demolition and the 865 High Bay Brokk test have shown the fixative capabilities of the CC Fix. Refer to Attachment D for survey results of the 207 Tank demolition and Attachment E for results of the 865 High Bay Brokk demolition test. Additionally, CC Fix is successfully utilized around plant site on a routine basis to control and contain beryllium contamination. Therefore, applying fixative to the wall, ceiling and 2<sup>nd</sup> floor mezzanine surfaces was determined to be the safest path-forward.

4.1.5. Perform Beryllium PDS of the Walls, Ceiling & 2nd Floor Mezzanine

After the fixative is applied to the wall, ceiling & 2nd floor mezzanine surfaces and has had time to cure, a routine beryllium PDS of the walls, ceiling & 2nd floor mezzanine will be performed to verify that they meet the unrestricted release criteria specified in *the RFCA RSOP for Facility Disposition, Section 4.1, Table 3*.

**Table 3. Unrestricted Release Criteria**

Contaminant	Requirement Source	Unrestricted Release Threshold
Beryllium	10 CFR 850.31	Loose surface contamination concentrations are less than $0.2 \text{ ug}/100\text{cm}^2$

4.1.6. Walls, Ceiling & 2nd Floor Mezzanine are now Ready for Demolition in Conjunction with the Floor

After the PDS of the walls, ceiling & 2nd floor mezzanine is completed and all data meets the unrestricted release criteria specified in *the RFCA RSOP for Facility Disposition, Section 4.1, Table 3*, the walls, ceiling & 2nd floor mezzanine will be prepared for demolition in conjunction with the main floor, once the main floor is ready for demolition (refer to steps 4.2.4 and 4.2.5).

## 4.2. Floors

### 4.2.1. Perform a General Cleaning of Surfaces

A general cleaning of the floors (i.e., using wet methods) will be performed in order to ready the 865 High Bay for asbestos clearance surveys, as well as gross decontamination of removable radiological and beryllium contamination. Based on recent in-process radiological surveys of floor, there is little if any removable contamination but a large amount of fixed contamination, especially in the cracks and seams of the floor. Refer to Attachment F for 865 High Bay in-process radiological floor and pit survey data, and Attachment G for slab core data.

Due to the inaccessible areas where contamination exists (i.e., in the slab seams, cracks, and potential under-building-contamination (UBC)), a complete decontamination of all remaining radiological and beryllium contamination was determined to be not practical prior to demolition. The prognosis for successfully achieving unrestricted free release levels of the slab disqualified this path-forward. The only possible method of completely decontaminating the slab would be to first scabble the entire floor surface to remove the fixed surface contamination. Then either saw-cut or jackhammer out every crack and seam. Remove any other slab area that contains UBC. And finally, remediate all UBC soil. The worker health and safety risks of performing this work is high due to the use of high-risk equipment such as dry scabblers, concrete saw cutters and jackhammers.

Just dry scabbling the floor surfaces would still leave the majority of the slab contaminated due to seam, crack and UBC contamination, and thus a large portion of the slab would still need to be managed as LLW. Therefore, performing a general cleaning versus a complete decontamination was determined to be the safest path-forward.

### 4.2.2. Perform a Modified PDS of Floors

A modified PDS of the floors will be performed to verify that the gross removable radiological and beryllium contamination has been removed, and to confirm final fixed radiological contamination levels of the floor prior to demolition. Note: the intent of this survey is not to verify that the floor meets the unrestricted release criteria per the *RFCA RSOP for Facility Disposition, Section 4.1, Table 3.*, but rather to document the actual LLW conditions of the slab prior to demolition. The modified PDS will include systematically gridded radiological total and removable measurements, and biased measurements at potential hot spot locations as normal. Beryllium PDS samples and chemical PDS samples (if required) will also be performed as normal. Radiological scanning will not be performed on the floor since scan data is not needed for waste disposal calculations, nor is it needed for *a priori* airborne calculations.

The slab will be dispositioned in a manner equivalent to *Section 4., Demolition Approach of RFCA RSOP for Facility Disposition*, which states: “If the slab, foundation or footing does not meet the unrestricted release criteria after decontamination activities or there is soil contamination beneath the slab, foundation or footing, the slab, foundation or footing will be removed beyond 3 feet below final proposed grade in accordance with the requirements of this RSOP. Figure 2 is a decision tree that documents the disposition of slabs, foundations and footings. The disposition of the soil beneath the facility is not within the scope of the RSOP, but will be addressed by *Environmental Restoration (ER) in a separate RSOP.*” Figure 2, *Slab/Foundation/Footing Disposition Process* tree states that if the slab foundation or footing does not meet the unrestricted release criteria, it should be dispositioned in accordance with a PAM, IM/IRA, or DOP mod. Section 6.6, *Building Foundation and Slab Removal*, of the *RFCA RSOP for Routine Soil Remediation*, states that “ER staff will remove the following slabs and foundations: Building 865.” Since the *RFCA RSOP for Routine Soil Remediation* is an equivalent document to a PAM or IM/IRA, and since numerous other contaminated slabs have been safely and efficiently removed utilizing the *RFCA RSOP for Routine Soil Remediation* (e.g., B123, 441, 662, and 663 slabs), K-H proposes utilizing this RSOP for the removal of the 865 building slab, foundations and footings.

#### 4.2.3. Apply InstaCote on Concrete Floor

InstaCote SE polyurea (a.k.a. InstaCote) will be liberally and uniformly applied to the top of the concrete floor (a minimum of a ¼ inch thick layer). The purpose of the InstaCote is to 1) further lock down the already fixed radiological contamination, 2) lock down any remaining low-level removable beryllium contamination, and 3) protect and cushion the LLW floor from the impact of the falling wall, ceiling & 2nd floor mezzanine debris during demolition and during debris removal. The InstaCote will also provide a convenient seamless barrier between the clean wall, ceiling & 2nd floor mezzanine debris and the contaminated floor. While it is not expected that the InstaCote will make an impenetrable barrier during demolition, it is expected that the InstaCote will hold up adequately to prevent the spread of airborne contamination, and reduce the spread of removable and fixed contamination to a manageable level. All 865 High Bay InstaCoted demolition debris will be managed as LLW/Be waste.

InstaCote has been widely used around plantsite in order to effectively lock down contamination (both removable and fixed radiological and beryllium contamination) during the shipment of contaminated waste. Additionally, a demolition test was performed at the 980 Pad using clean demolition rubble to test the durability of InstaCote on slab concrete during demolition conditions. The test demonstrated that InstaCote holds up very well to demolition debris falling onto the InstaCoted concrete surfaces, and also holds up well to demolition heavy-equipment movement. Refer to Attachment H for the pre-demolition, in-process demolition, and post-demolition results of the 980 Pad InstaCote test.

During the 980 Pad InstaCote test, CC Fix was applied to one test pad area prior to applying the InstaCote, and another test pad area had InstaCote applied directly to the concrete with no CC Fix in between. During the test, the InstaCote adhered to the concrete much better without the intermediate layer of CC Fix, than with it, with no decrease in encapsulation efficiency. Therefore, the Project determined that it would be best management practice to apply the InstaCote directly to the floor.

Other floor covering options were evaluated, such as covering all or some of the floor with metal plates. However, hoisting and rigging hundreds of metal plates and securely fastening them to the slab posed unacceptably high worker health and safety risks. Over 450, 5 by 10 foot, ½ inch thick metal plates would be required to adequately cover the entire High Bay floor. If only the seams and cracks were covered, over 2,900 linear feet of ½ inch thick metal plates would be required to adequately cover all the contaminated seams and cracks in the High Bay.

Although the worker health and safety risks of performing this metal plate hoisting, rigging, and attaching work alone is very high, the structural integrity of metal plates would also be in question during demolition. The buckling effect of the slab that would take place next to each of the building support columns as the walls were brought down would disturb the metal plates next to the columns. With the use of InstaCote, this buckling effect will not have as large of an impact on protection of the slab, since the InstaCote would remain attached to the concrete during buckling movement.

As with InstaCote, there is no way to guarantee that all of the metal plates will remain intact during demolition, and it is likely some would move during demolition. However, when comparing the worker health and safety risks to applying InstaCote to the floor versus hoisting, rigging, and attaching metal plates to the floor, the InstaCote option was determined to be a much safer and more practical method of protecting the floor during demolition.

4.2.4. Demolish 865 High Bay Walls, Ceiling & 2nd Floor Mezzanine

Once the InstaCote had had an adequate time to fully cure, demolition of the 865 High Bay walls, ceiling & 2nd floor mezzanine would commence. As much as practical, demolition would be performed in such a manner as to minimize the amount of debris that falls on the InstaCoted floor. For example, when practical, walls would be pulled outward instead of pushing them inward. Additional radiological and beryllium air monitoring will be in-place during demolition activities. Periodic in-process radiological and beryllium characterization surveys will be performed on demolition debris and heavy-equipment during and after demolition activities on a per shift basis as a minimum.

The work area will be controlled to only necessary personnel, and appropriate PPE and hazard control permits will be in place for those entering the work area.

4.2.5. Remove and Manage Wall, Ceiling & 2nd Floor Mezzanine Debris as Sanitary/Be Waste

Once the High Bay walls, ceiling & 2nd floor mezzanine have been brought down, debris cleanup activities will commence. Extra Spotters and RCTs will be on hand during demolition debris cleanup to inspect for InstaCote on the sanitary debris. If any InstaCoted material is identified in the debris, that debris will be segregated and managed as LLW/Be waste. Waste that does not have InstaCote will be managed as sanitary/Be waste. Similar monitoring and work controls will be in place during debris removal activities as were in place during wall, ceiling & 2nd floor mezzanine demolition activities.

4.2.6. Remove and Manage Floor as LLW/Be Waste

Once the High Bay wall, ceiling & 2nd floor mezzanine debris cleanup activities are complete, floor removal will commence. Floor debris will be removed and managed as LLW/Be waste utilizing the *RFCA RSOP for Routine Soil Remediation*. Similar monitoring and work controls will be in place during floor removal activities as were in place during wall, ceiling & 2nd floor mezzanine demolition and cleanup activities. Additionally, whenever the InstaCote comes free from the concrete during removal activities, those concrete surfaces will be sprayed with CC Fix to minimize the potential for contamination spread. Prior to demolition of the building a drawing will be made showing the cracks and seams in the floor. This drawing will be referenced to determine additional biased soil sample locations for possible further soil remediation work during slab removal activities. Soil remediation should be performed in conjunction with concrete removal as much as practical to avoid cross-contamination of clean soil with contaminated soil, and vise-versa.

#### 4.3. Pits

Currently, there are two different potential path-forward options for managing the floor pits in the 865 High Bay. Which path-forward option is chosen will depend on the outcome of the 865 High Bay UBC soil sample results that have yet to be collected. If the UBC soil sample results show that soil remediation is necessary, then Option 1 will be chosen. If the UBC soil sample results show that soil remediation is not necessary, then Option 2 will be chosen. Option 2 will only be undertaken if soil remediation is not required, and decontamination of pits is successful after a reasonable expenditure of time and resources.

While an Option 2 scenario is not likely based on what has been observed in other areas of the 865 High Bay slab (i.e., UBC contamination), it is included here as an alternative path-forward. Since there are several very thick pieces of concrete in the pits (>7 feet thick), it was determined that the safest approach for handling these areas was to decontaminate these surfaces below three feet of final grade to unrestricted release levels and leave them in place. There are also some equipment pads on the main floor that are very thick and fall into this same scenario, and may be handled in a similar manner after the portions of the pad above three feet of final grade are removed. Refer to Attachment I for a drawing depicting the various slab thicknesses in the 865 Building.

##### 4.3.1. Option 1 – Soil Remediation Necessary

###### 4.3.1.1. *Perform a General Cleaning of Dusty Surfaces*

Perform a general cleaning of dusty pit surfaces in the same manner as described for the floors in Section 4.2.1. The rationale for this step is the same rationale as described for the floors in Section 4.2.1.

###### 4.3.1.2. *Perform PDS of Pits*

Perform a modified PDS of the pits in the same manner as described for the floors in Section 4.2.2. The rationale for this step is the same rationale as described for the floors in Section 4.2.2.

###### 4.3.1.3. *Apply CC Fix on Concrete and Fill in Pits with Gravel/Soil*

Apply CC Fix to the concrete in the same manner as described for the walls and ceiling in Section 4.1.4. The rationale for this step is the same rationale as described for the walls and ceiling in Section 4.1.4. The pits will then be filled with clean gravel or soil, or some other adequate covering. The clean gravel/soil will protect the clean wall, ceiling & 2<sup>nd</sup> floor mezzanine debris from being cross-contaminated with the contaminated pit surfaces. Filling in the pits with gravel/soil will also protect the heavy demolition equipment from falling into the pits during debris removal activities.

#### 4.3.1.4. *Demolish Pits in Conjunction with Floors*

Demolish the pits in conjunction with the floors in the same manner as described for the floors in Section 4.2.6. The rationale for this step is the same rationale as described for the floors in Sections 4.2.4 - 4.2.6. Soil remediation will be performed in manner that minimizes cross-contamination of clean soil with contaminated soil, and vise-versa.

#### 4.3.2. Option 2– Soil Remediation Not Necessary

##### 4.3.2.1. *Decontaminate Pit Surfaces Below Three Feet of Final Grade*

Decontaminate all pit surfaces below three feet of final grade to unrestricted release levels as described in the *RFCA RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* and the *RFETS RSOP for Facility Disposition*. The rationale for not decontaminating the pit surfaces above three feet of final grade to unrestricted release levels is that this portion of the pit concrete will be removed and managed as LLW/Be waste in same manner as floors as described in Section 4.2.6. Pit surfaces below three feet of final grade will be left in-place after completion of the project, with no further actions required.

##### 4.3.2.2. *Perform PDS of Pits*

Perform a routine PDS of pit surfaces below three feet of final grade to confirm that the unrestricted release levels described in the *RFETS RSOP for Facility Disposition* are met. Perform a modified PDS of pit surfaces above three feet of final grade in the same manner as described for the floors in Section 4.2.2. The rationale for a modified PDS of pit surfaces above three feet of final grade is a similar rational as described for the floors in Section 4.2.2.

##### 4.3.2.3. *Protect Pit Surfaces Below Three Feet of Final Grade*

Pit surfaces below three feet of final grade will be protected from being contaminated by floor demolition debris, or from clean wall, ceiling & 2nd floor mezzanine debris, by filling in the pits with clean soil or gravel, or some other adequate covering. Filling in the pits with gravel/soil will also protect the heavy demolition equipment from falling into the pits during debris removal activities. Filling in the pits will also minimize demolition cleanup work during debris removal activities.

*4.3.2.4. Perform a General Cleaning of Dusty Surfaces Above Three Feet of Final Grade*

Perform a general cleaning of dusty pit surfaces above three feet of final grade in the same manner as described for the floors in Section 4.2.1. The rationale for this step is the same rationale as described for the floors in Section 4.2.1.

*4.3.2.5. Apply CC Fix on Top of Concrete*

Apply CC Fix on top of the concrete on pit surfaces above three feet of final grade in the same manner as described for the walls and ceiling in Section 4.1.4. The rationale for this step is the same rationale as described for the walls and ceiling in Section 4.1.4.

*4.3.2.6. Demolish Pit Surfaces Above Three Feet of Final Grade in Conjunction with Floors*

Demolish the pit surfaces above three feet of final grade in conjunction with the floors in the same manner as described for the floors in Section 4.2.6. The rationale for this step is the same rationale as described for the floors in Sections 4.2.4 – 4.2.6. In addition, removal any gravel/soil from the pits that could have become contaminated during demolition.

**5. DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES**

The demolition and disposal of Building 865 High Bay will generate a variety of wastes. Estimated waste types and waste volumes are presented below. The walls, ceiling & 2nd floor mezzanine demolition debris will be managed as sanitary/beryllium waste. The floor slab demolition debris will be managed as radioactive (LLW) and beryllium waste. Depending on the results of the under-building soil sample results that will be obtained in the near future, the floor pit demolition debris will be managed as radioactive (LLW) and beryllium waste, or sanitary/beryllium waste. All under-slab utilities and piping systems shall be managed as radioactive (LLW) and beryllium waste during demolition. None of the concrete debris will be used as backfill onsite in accordance with the *RFCA RSOP for Recycling Concrete*.

WASTE TYPES AND VOLUME ESTIMATES			
Location	Sanitary Waste (cu ft)	Sanitary/Be Waste (cu ft)	LLW/Be Waste (cu ft)
865 High Bay	0	Walls/Ceiling 50,000	Slabs 21,000
865 Low Bay	Walls/Ceiling Slabs 24,000	0	Slab Hot Spots 1,000
865 Soil	0	0	6,000

## 6. SUMMARY AND CONCLUSIONS

The purpose of this Building 865 High Bay Demolitions Path-forward Plan is to document the steps necessary to safely demolish the 865 Building High Bay after *RFCA RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities* have been completed. The proposal assumes that all of the small and large equipment will already be stripped out and removed from the building. Thus, this proposal is applicable to the remaining floor, walls, ceiling, and pits of the 865 High Bay. Except for the small crack in the 865 Low Bay floor, all of the 865 Low Bay concrete meets the unrestricted release criteria specified in the *RFETS RSOP for Facility Disposition*.

The proposed demolition path-forward steps outlined in Sections 3 and 4 above were derived based on an evaluation of many factors including: worker health and safety risks, protection of the environment, feasibility of success, waste disposal considerations, cost and schedule. Although many factors were considered when determining the best, most practical path-forward, worker health and safety risks, and protection of the environment were the two main driving forces in determining this proposed path forward. The option of attempting to decontaminate and unconditionally release the facility surfaces in the 865 High Bay was discounted due to impracticality of achieving success. Radiological contamination has seeped between the cracks and seams of the slab, and potentially into the under-slab soil, to the extent that successfully achieving unconditional release of the slab prior to demolition is not feasible or practical. Any attempt to decontaminate and unconditionally release the slab would unnecessarily risk the D&D workers health and safety, with minimal chance of success.

A cost and schedule analysis was performed of the various options. Although the result of the analysis did show that cost and schedule savings would be gained by the proposed path-forward, the savings were not significant in terms of the overall project cost and schedule, and were not rated high in terms of decision making for the proposed path-forward.

Based on the applicable factors relating to demolition of the 865 Building, the proposed steps above were agreed upon by the subject-matter-experts working with and for the Project to ensure the demolition is accomplished safely. Each of the above steps were closely scrutinized from a safety and practicality aspect, and determined to be the safest path-forward from a worker health and safety risk standpoint, and protection of the environment standpoint. Although there is some risk with the proposed path-forward, as well as risks with all the possible options, including the option to attempt total decontamination, these risks are small and manageable.

Based on site experience and recent tests and small-scale demolitions, the use of CC Fix and InstaCote has shown that these products are excellent encapsulates and barriers to contamination spread. The 865 Project and product subject-matter-experts are confident that the risks of the proposed path-forward are reasonable and well within their capabilities of being safely managed during the demolition of the 865 building. Demolishing structures with contaminated slabs is not new to Rocky Flats. Safely demolishing contaminated structures such as Building 123, 441, 442, 662, 663 slabs, and Tank 207 has been safely performed and managed in the recent past.

All of the proposed path-forward steps above can be performed within the framework of RFCA and the current Regulator approved RSOPs. Since the wall, ceiling & 2nd floor mezzanine surfaces will meet the unrestricted release criteria specified in the site *Pre-Demolition Survey Plan* and the *RFETS RSOP for Facility Disposition*, the walls, ceiling & 2nd floor mezzanine can be demolished utilizing the *RFETS RSOP for Facility Disposition*. The proposed demolition path-forward for the floor is to manage the floor as LLW/Be waste. Both the *RFETS RSOP for Facility Disposition* and the *RFETS RSOP for Routine Soil Remediation* discusses and specifies how to demolish and manage contaminated slabs, foundations, and footings. Section 6.6, *Building Foundation and Slab Removal*, of the *RFCA RSOP for Routine Soil Remediation*, specifies that the ER staff will remove the Building 865 slab due to the UBC concerns.

Based on the above analysis, the 865 Project proposes to utilize this Building 865 High Bay Demolition Path-Forward Plan to complete the demolition of the 865 building. This path-forward was determined to be the safest to the workers and the environment, and still meet project objectives within a reasonable timeframe. Regulator involvement and participation will continue to be encouraged during the additional planning and execution of this demolition path-forward plan.

## 7. REFERENCES

- DOE/RFFO, CDPHE, EPA, 1996. *Rocky Flats Cleanup Agreement (RFCA)*, July 19, 1996.
- K-H, 1999. *Decommissioning Program Plan*, June 21, 1999.
- MAN-131-QAPM, *Kaiser-Hill Team Quality Assurance Program*, Rev. 1, November 1, 2001.
- MAN-076-FDPM, *Facility Disposition Program Manual*, Rev. 3, January 1, 2002.
- MAN-077-DDCP, *Decontamination and Decommissioning Characterization Protocol*, Rev. 4, July 15, 2002.
- MAN-127-PDSP, *Pre-Demolition Survey Plan for D&D Facilities*, Rev. 1, July 15, 2002.
- RFETS RSOP for Facility Disposition, Rev. 0, August 14, 2000.
- RFETS RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities, Rev. 2, November 4, 2002
- RFETS RSOP for Routine Soil Remediation, January 2002
- RFETS, RFCA RSOP for Recycling Concrete, Rev. 0, September 28, 1999
- Reconnaissance Level Characterization Report for the Building 865 High Bay, dated September 17, 2001, Revision 0.
- Building 865 Historical Site Assessment Report, incorporated as part of the Building 865 High Bay RLCR, dated July 2001.

## ATTACHMENT A

### 865 High Bay Wallboard Photos

## ATTACHMENT B

### 865 High Bay Radiological Wall and Ceiling Survey Data

## ATTACHMENT C

### 865 High Bay Beryllium Wall and Ceiling Sample Data

## ATTACHMENT D

### Tank 207 Demolition Survey Data

## ATTACHMENT E

### 865 High Bay Brokk Demolition Test White Paper

## ATTACHMENT F

### Recent 865 High Bay In-process Radiological Floor and Pit Survey Data

## ATTACHMENT G

### 865 High Bay Radiological Slab Core Data

## ATTACHMENT H

### 980 Pad InstaCote Demolition Test White Paper

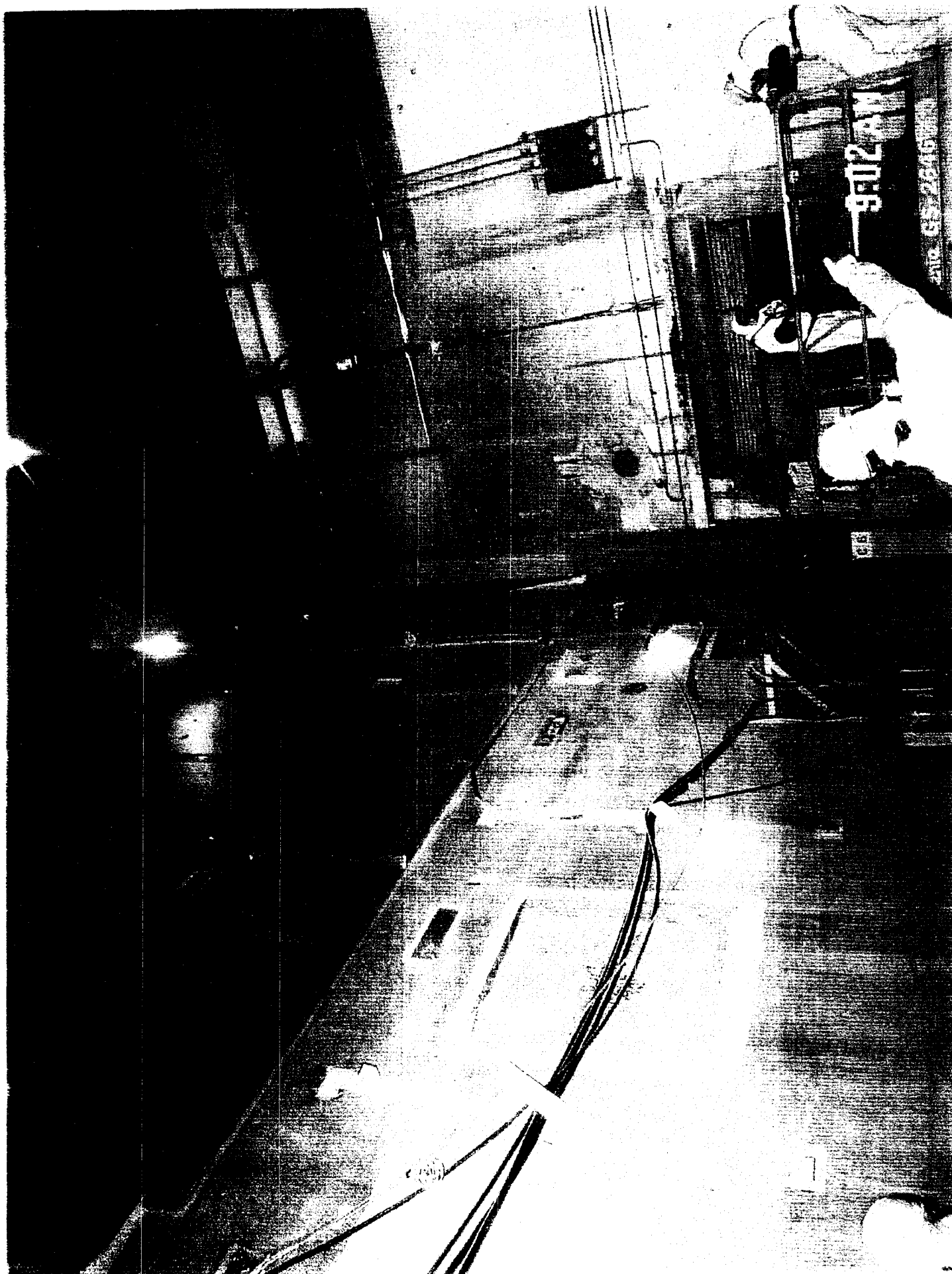
## ATTACHMENT I

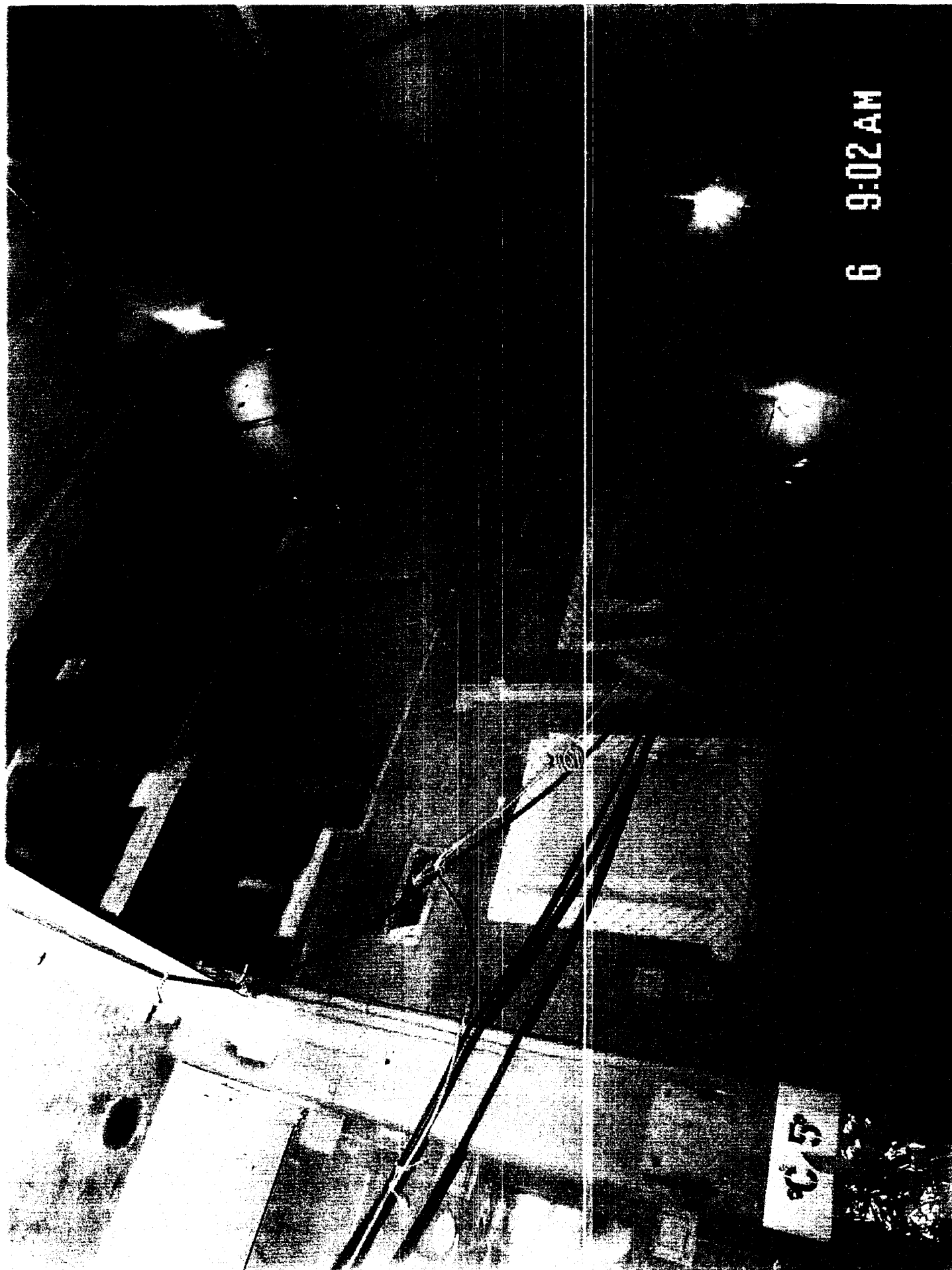
### 865 Building Slab Thickness Drawing

## ATTACHMENT A

### 865 High Bay Wallboard Photos

PHOTOS  
Best Available Copy





6 9:02 AM

13



## ATTACHMENT B

### 865 High Bay Radiological Wall and Ceiling Survey Data

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

INSTRUMENT DATA								
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra	Survey type: Contamination		
Model	2929	Model	2929	Model	DP-6	Building: 865		
Serial #	176082	Serial #	176102	Serial #	3124	Location: High bay various wall locations		
Cal Due	6-11-03	Cal Due	6-9-03	Cal Due	9/24/03	Purpose: Survey for demo		
Bkg.	0.2 cpm $\alpha$	Bkg.	0.2 cpm $\alpha$	Bkg.	2 cpm $\alpha$	RWP #: 03-865-001		
Efficiency	35.5 %	Efficiency	34.4 %	Efficiency	21.8 %			
MDA	18 dpm $\alpha$	MDA	18 dpm $\alpha$	MDA	43 dpm $\alpha$			
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra	Date: 5-20-03 Time: 1400		
Model	2929	Model	2929	Model	DP-6	<div style="background-color: black; width: 100%; height: 40px;"></div>		
Serial #	176082	Serial #	176102	Serial #	3124			
Cal Due	6-11-03	Cal Due	6-9-03	Cal Due	9/24/03			
Bkg.	79.2 cpm $\beta$	Bkg.	68.5 cpm $\beta$	Bkg.	582 cpm $\beta$	RCT: N/A / N/A / N/A		
Efficiency	38.6 %	Efficiency	40.8 %	Efficiency	30.8 %	Print name                      Signature                      Emp. #		
MDA	205 dpm $\beta$	MDA	205 dpm $\beta$	MDA	373 dpm $\beta$			

PRN/REN #: N/A

**Comments** Isotope of concern is Depleted Uranium (U-238). Surveyed the wall and the insulation removed for the D&D of building 865. Various areas surveyed with the results of less than MDA.

All insulation removed and placed in cargo for disposal. Results below are for each section surveyed.

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
2	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
3	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
4	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
5	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
6	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
7	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
8	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
9	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
10	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
11	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
12	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
13	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
14	Various wall locations in building 865	<18	<43	N/A	<205	<373	N/A
15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Date Reviewed: 5/20/03 RS Supervision: \_\_\_\_\_

Print Name

Signature

Emp. #

COPY

## ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

### INSTRUMENT DATA

Mfg. <u>NA</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>
Model <u>NA</u>	Model <u>2929</u>	Model <u>DP-6</u>
Serial # <u>NA</u>	Serial # <u>176082</u>	Serial # <u>3250</u>
Cal Due <u>NA</u>	Cal Due <u>6/11/03</u>	Cal Due <u>7/13/03</u>
Bkg. <u>NA</u> cpm $\alpha$	Bkg. <u>0.4</u> cpm $\alpha$	Bkg. <u>7</u> cpm $\alpha$
Efficiency <u>NA</u> %	Efficiency <u>35.5</u> %	Efficiency <u>21.8</u> %
MDA <u>NA</u> dpm $\alpha$	MDA <u>18</u> dpm $\alpha$	MDA <u>68</u> dpm $\alpha$
Mfg. <u>NA</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>
Model <u>NA</u>	Model <u>2929</u>	Model <u>DP-6</u>
Serial # <u>NA</u>	Serial # <u>176082</u>	Serial # <u>3250</u>
Cal Due <u>NA</u>	Cal Due <u>6/11/03</u>	Cal Due <u>7/13/03</u>
Bkg. <u>NA</u> cpm $\beta$	Bkg. <u>83.2</u> cpm $\beta$	Bkg. <u>641</u> cpm $\beta$
Efficiency <u>NA</u> %	Efficiency <u>38.6</u> %	Efficiency <u>31.0</u> %
MDA <u>NA</u> dpm $\beta$	MDA <u>205</u> dpm $\beta$	MDA <u>389</u> dpm $\beta$

Survey type: Alpha, beta Contamination

Building: 865

Location: High bay (various locations)

Purpose: In-progress job coverage

RWP #: 03-865-001

Date: 5/19/03 Time: 1000

RCT: N/A / N/A / N/A

Print name Signature Emp. #

PRN/REN #: N/A

Comments Survey taken to support on-going D&D activities.

The High Bay is Posted Contamination Area, RWP and TLD Required for Entry.

### SURVEY RESULTS

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA
2	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA
3	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA
4	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA
5	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA
6	Wall after removing insulation (To 6 ft)	<18	<68	NA	<205	<389	NA
7	Wall of Trench	NA	NA	<68	NA	NA	485
8	Floor of Trench	NA	NA	<68	NA	NA	485
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA

Date Reviewed: 5/19/03 RS Supervision: \_\_\_\_\_

35

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg. <u>NA</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>
Model <u>NA</u>	Model <u>2929</u>	Model <u>DP-6</u>
Serial # <u>NA</u>	Serial # <u>147735</u>	Serial # <u>3124</u>
Cal Due <u>NA</u>	Cal Due <u>11/16/03</u>	Cal Due <u>9/24/03</u>
Bkg. <u>NA</u> cpm $\alpha$	Bkg. <u>0.1</u> cpm $\alpha$	Bkg. <u>4</u> cpm $\alpha$
Efficiency <u>NA</u> %	Efficiency <u>35.5</u> %	Efficiency <u>21.8</u> %
MDA <u>NA</u> dpm $\alpha$	MDA <u>18</u> dpm $\alpha$	MDA <u>56</u> dpm $\alpha$

Mfg. <u>NA</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>
Model <u>NA</u>	Model <u>2929</u>	Model <u>DP-6</u>
Serial # <u>NA</u>	Serial # <u>147735</u>	Serial # <u>3124</u>
Cal Due <u>NA</u>	Cal Due <u>11/16/03</u>	Cal Due <u>9/24/03</u>
Bkg. <u>NA</u> cpm $\beta$	Bkg. <u>72.8</u> cpm $\beta$	Bkg. <u>497</u> cpm $\beta$
Efficiency <u>NA</u> %	Efficiency <u>38.6</u> %	Efficiency <u>30.8</u> %
MDA <u>NA</u> dpm $\beta$	MDA <u>205</u> dpm $\beta$	MDA <u>346</u> dpm $\beta$

Survey type: Alpha, beta Contamination

Building: 865

Location: High bay (various locations)

Purpose: In-progress job coverage

RWP #: 03-865-001

Date: 5/21/03 Time: 1000

RC

RCT: N/A / N/A / N/A

Print name      Signature      Emp. #

PRN/REN #: N/A

Comments Survey taken to support on-going D&D activities.

The High Bay is Posted Contamination Area, RWP and TLD Required for Entry.

## SURVEY RESULTS

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe	dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe
1	Wall after removing insulation (To 6 ft)	<18	<56	NA	<205	<346	NA
2	Wall after removing insulation (To 6 ft)	<18	<56	NA	<205	<346	NA
3	Wall after removing insulation (To 6 ft)	<18	<56	NA	<205	<346	NA
4	Wall after removing insulation (To 6 ft)	<18	<56	NA	<205	<346	NA
5	Wall after removing insulation (To 6 ft)	<18	<56	NA	<205	<346	NA
6	Wall after removing insulation (To 6 ft)	<18	<56	NA	<205	<346	NA
7	I Beam prior to cutting	<18	<56	NA	<205	<346	NA
8	I Beam prior to cutting	<18	<56	NA	<205	<346	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA

Date Reviewed: 5/21/03 RS Supervision: \_\_\_\_\_

COPY

## ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

### INSTRUMENT DATA

Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra
Model	2929	Model	2929	Model	DP-6
Serial #	176082	Serial #	176102	Serial #	3252
Cal Due	6-11-03	Cal Due	6-9-03	Cal Due	7-13-03
Bkg.	0.4 cpm $\alpha$	Bkg.	0.5 cpm $\alpha$	Bkg.	6 cpm $\alpha$
Efficiency	35.5 %	Efficiency	34.4 %	Efficiency	21.4 %
MDA	18 dpm $\alpha$	MDA	18 dpm $\alpha$	MDA	66 dpm $\alpha$
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra
Model	2929	Model	2929	Model	DP-6
Serial #	176082	Serial #	176102	Serial #	3252
Cal Due	6-11-03	Cal Due	6-9-03	Cal Due	7-13-03
Bkg.	77.5 cpm $\beta$	Bkg.	70.4 cpm $\beta$	Bkg.	518 cpm $\beta$
Efficiency	38.6 %	Efficiency	40.8 %	Efficiency	30.1 %
MDA	205 dpm $\beta$	MDA	205 dpm $\beta$	MDA	361 dpm $\beta$

Survey type: Contamination

Building: 865

Location: High bay Northeast wall

Purpose: Survey for removal of Wall Insulation

RWP #: 03-865-001

Date: 5-12-03 Time: 1500

RCT

RCT: N/A / N/A / N/A

Print name

Signature

Emp. #

PRN/REN #: N/A

Comments: Isotope of concern is Depleted Uranium (U-238). Survey for the wall in the High bay Northeast wall.

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe	dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe
1	Northeast wall at opening to room 171	<66	<66	N/A	<361	<361	N/A
2	Northeast wall at opening to room 171	<66	<66	N/A	<361	<361	N/A
3	Northeast wall at opening to room 171	<66	<66	N/A	<361	<361	N/A
4	Northeast wall at opening to room 171	<66	<66	N/A	<361	<361	N/A
5	Northeast wall at opening to room 171	<66	<66	N/A	<361	700	N/A
6	Northeast wall at opening to room 171	<66	<66	N/A	<361	700	N/A
7	Northeast wall at opening to room 171	<66	<66	N/A	<361	700	N/A
8	Northeast wall at opening to room 171	<66	<66	N/A	<361	700	N/A
9	Insulation Removed	<66	<66	N/A	<361	700	N/A
10	Insulation Removed	<66	<66	N/A	<361	700	N/A
11	Insulation Removed	<66	<66	N/A	<361	700	N/A
12	Insulation Removed	<66	<66	N/A	<361	700	N/A
13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Date Reviewed: 5/12/03

RS Supervision:

Print Name

Signature

Emp. #

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# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra
Model	2929	Model	2929	Model	DP-6
Serial #	176082	Serial #	176102	Serial #	3248
Cal Due	6-11-03	Cal Due	6-9-03	Cal Due	7-9-03
Bkg.	0.4 cpm $\alpha$	Bkg.	0.4 cpm $\alpha$	Bkg.	1 cpm $\alpha$
Efficiency	35.5 %	Efficiency	34.4 %	Efficiency	22.4 %
MDA	18 dpm $\alpha$	MDA	18 dpm $\alpha$	MDA	33 dpm $\alpha$
Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra
Model	2929	Model	2929	Model	DP-6
Serial #	176082	Serial #	176102	Serial #	3248
Cal Due	6-11-03	Cal Due	6-9-03	Cal Due	7-9-03
Bkg.	83.2 cpm $\beta$	Bkg.	65.0 cpm $\beta$	Bkg.	474 cpm $\beta$
Efficiency	38.6 %	Efficiency	40.8 %	Efficiency	29.8 %
MDA	205 dpm $\beta$	MDA	205 dpm $\beta$	MDA	349 dpm $\beta$

Survey type: Contamination

Building: 865

Location: High bay various wall locations

Purpose: Survey for demo

RWP #: 03-865-001

Date: 5-19-03 Time: 0930

RCT: N/A / N/A / N/A

Print name Signature Emp. #

PRN/REN #: N/A

Comments Isotope of concern is Depleted Uranium (U-238). Surveyed the wall and the insulation removed prior to D&D of building 865. All insulation removed was disposed of in cargo.

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
2	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
3	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
4	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
5	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
6	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
7	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
8	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
9	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
10	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
11	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
12	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
13	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
14	Various wall locations in building 865	<18	<33	N/A	<205	<349	N/A
15	Various wall locations in building 866	<18	<33	N/A	<205	<349	N/A
16	Various wall locations in building 867	<18	<33	N/A	<205	<349	N/A
17	Various wall locations in building 868	<18	<33	N/A	<205	<349	N/A
18	Various wall locations in building 869	<18	<33	N/A	<205	<349	N/A
19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Date Reviewed: 5/19/03 RS Supervision:

Print Name

Signature

Emp. #

## ATTACHMENT C

### 865 High Bay Beryllium Wall and Ceiling Sample Data

## Richen, Mike

**From:** Richen, Mike  
**Sent:** Wednesday, April 30, 2003 3:50 PM  
**To:** Richen, Mike; Lesinski, Mark; Clifton, John; 'bcorb@ecc.net'; McGrory, Mike; Hanson, Jack; Parsons, Duane; Daniels, Kevin  
**Cc:** Miller, Gregg; Boley, Charles; Holwager, LeeAnn; Hiebert, Doug  
**Subject:** REMOVABLE BERYLLIUM WIPE SAMPLES ON WALLS & CEILINGS GRIDS 16 & 20 (03Z1329)

### PURPOSE

To provide representative removable beryllium surface contamination levels of the ceiling and wall areas of the high bay building 865.

### SCOPE

Collect approximately twenty (20) removable beryllium wipe samples from each ceiling and wall area associated with two representative sections of the building 865 high bay. Approximately twenty (20) samples will be collected from each area, that is twenty (20) from the ceiling and twenty (20) from the wall in each grid. The walls in the high bay are covered by an approximately two (2) in thick bat of fiberglass with a silver foil surface. The following additional samples will be collected from the indicated area. This will provide information about the crevices in the concrete seams, wall penetrations, and horizontal surfaces that will remain after the high bay of b 865 is completely stripped.

#### Wall

- some horizontal protruding systems
- crevices, seams, cut outs
- wall penetrations

#### Ceiling

- downward facing surfaces
- horizontal surfaces that will be left
- holes through the twin Ts
- seams

Grids 16 and twenty were chosen for the following reasons. Grid 16 was the approximate location of the beryllium refinery which had very high levels of beryllium contamination. Grid 20 was the approximate location of the Erie Ram and near the Steam Hammer, two large pieces of metal working equipment.

### DISCUSSION

IH collected one hundred and four (104) removable beryllium wipe samples from the ceilings and walls in grids 16 and 20 of the high bay of building 865 from April 15 until 22, 2003. Of the one hundred and four (104) samples seven resulted in detectable levels of beryllium i.e. > 0.1 ug/100cm<sup>2</sup>. Ninety three percent (93%) of the samples were non detectable, i.e. <0.1 ug/100cm<sup>2</sup>. A map is available documenting the locations of the samples.

The detectable results are as follows.

Grid		ug/100cm <sup>2</sup>
16	wall	0.346
	wall, top of duct	0.218
	wall	0.398
	ceiling, top of beam	0.656
	ceiling, top of beam	0.7
	ceiling, "u" hanger	0.167
20	Ceiling	0.143

There were no detectable beryllium levels found in cracks, holes in the Twin Ts, or under fiberglass on the walls.

### CONCLUSIONS

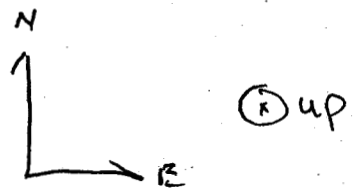
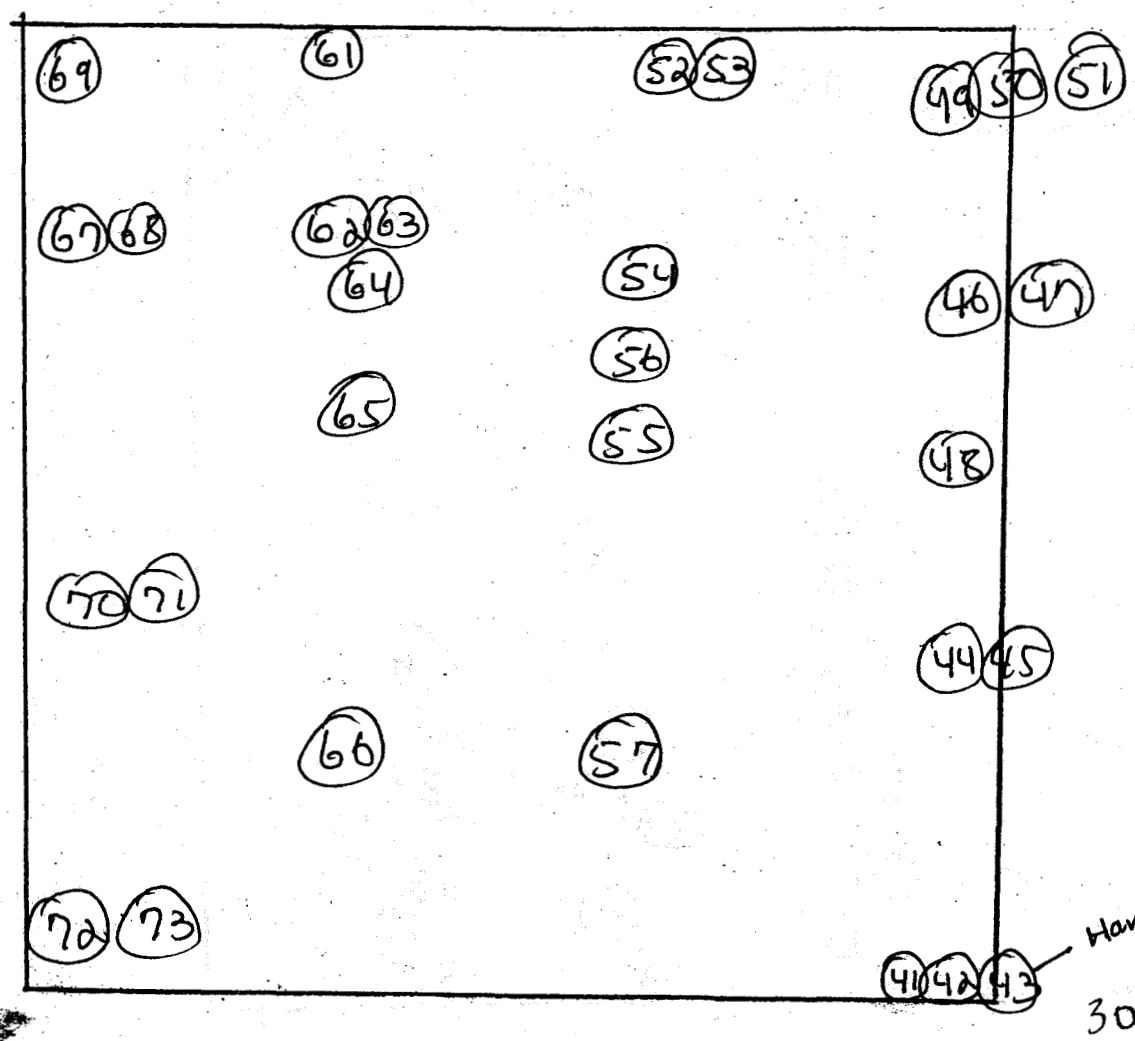
1. Results show more removable contamination in grid 16 as expected.
2. Results show the amount of removable contamination was lower on the walls than the floors as expected.

Michael J. Richen, CIH  
Rocky Flats Closure Site Services  
10808 Highway 93  
Unit B, Building 883  
Golden, Colorado 80403-8200  
(303) 966-2337

Section 20, High Bay, B865

4/15/03 Cieling mJ Richan

-(0.xx) mJ/w/cm<sup>2</sup>

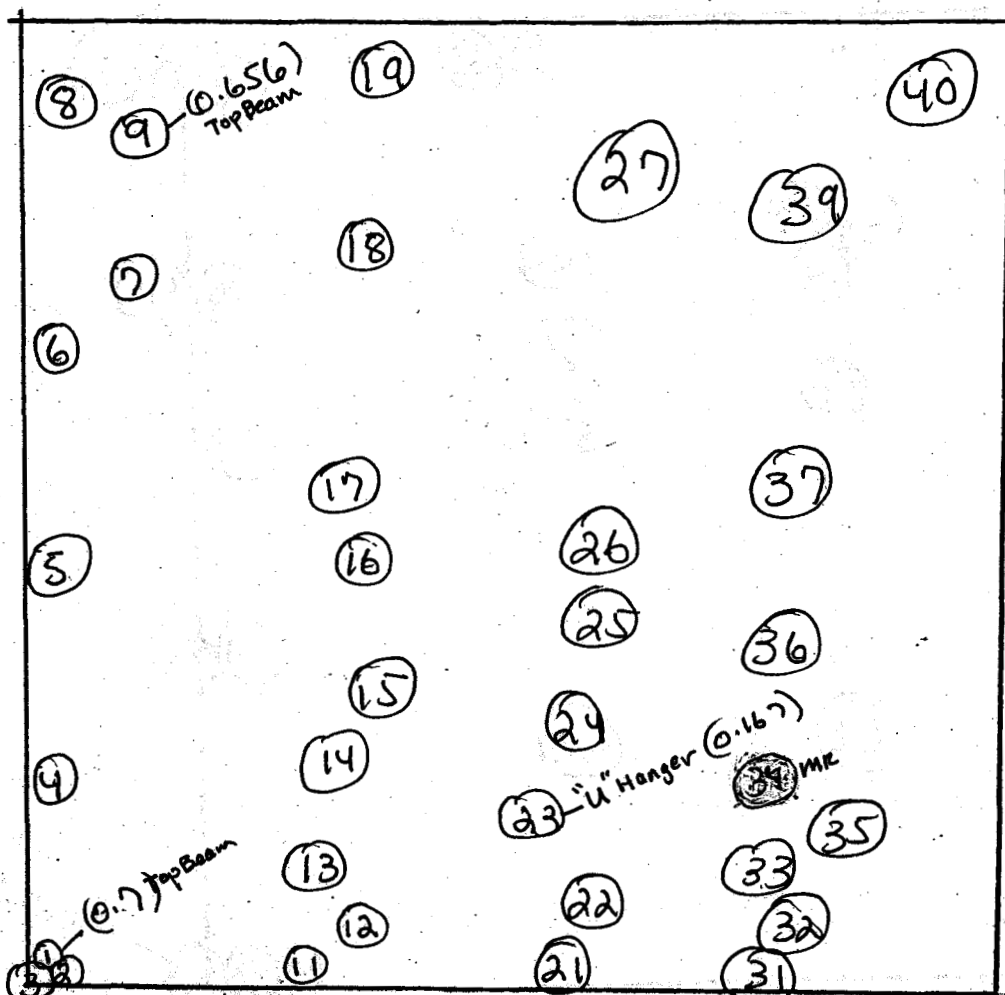


m

Section 16, High Bay, B 865

4/15/03 Ceiling

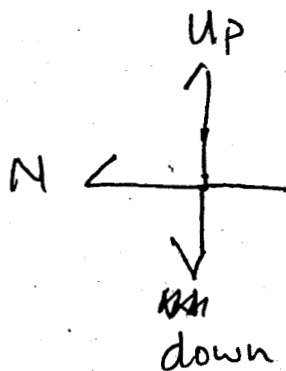
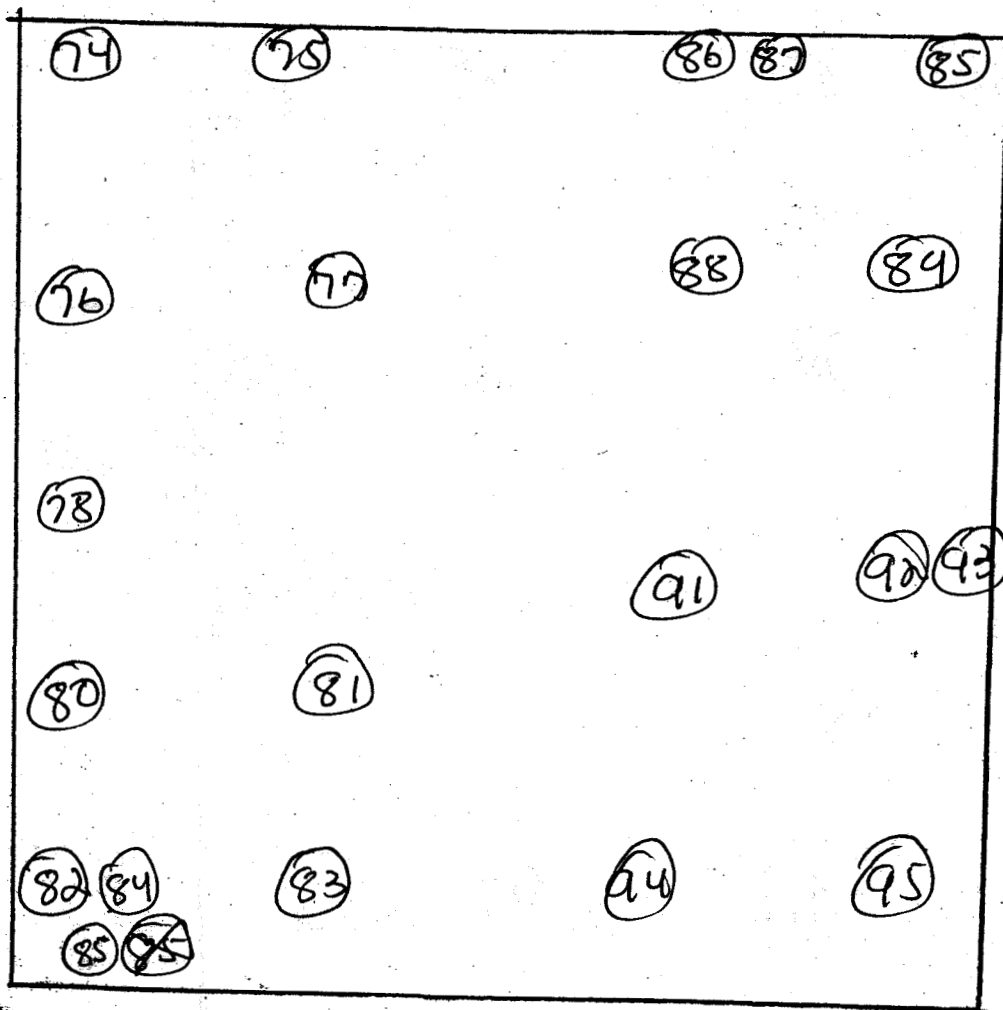
m J Richan

- 0.11  $\mu\text{g}/100\text{cm}^2$ 

39

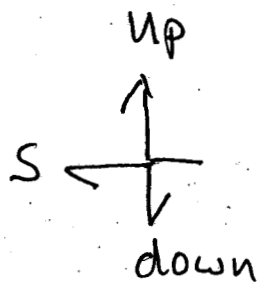
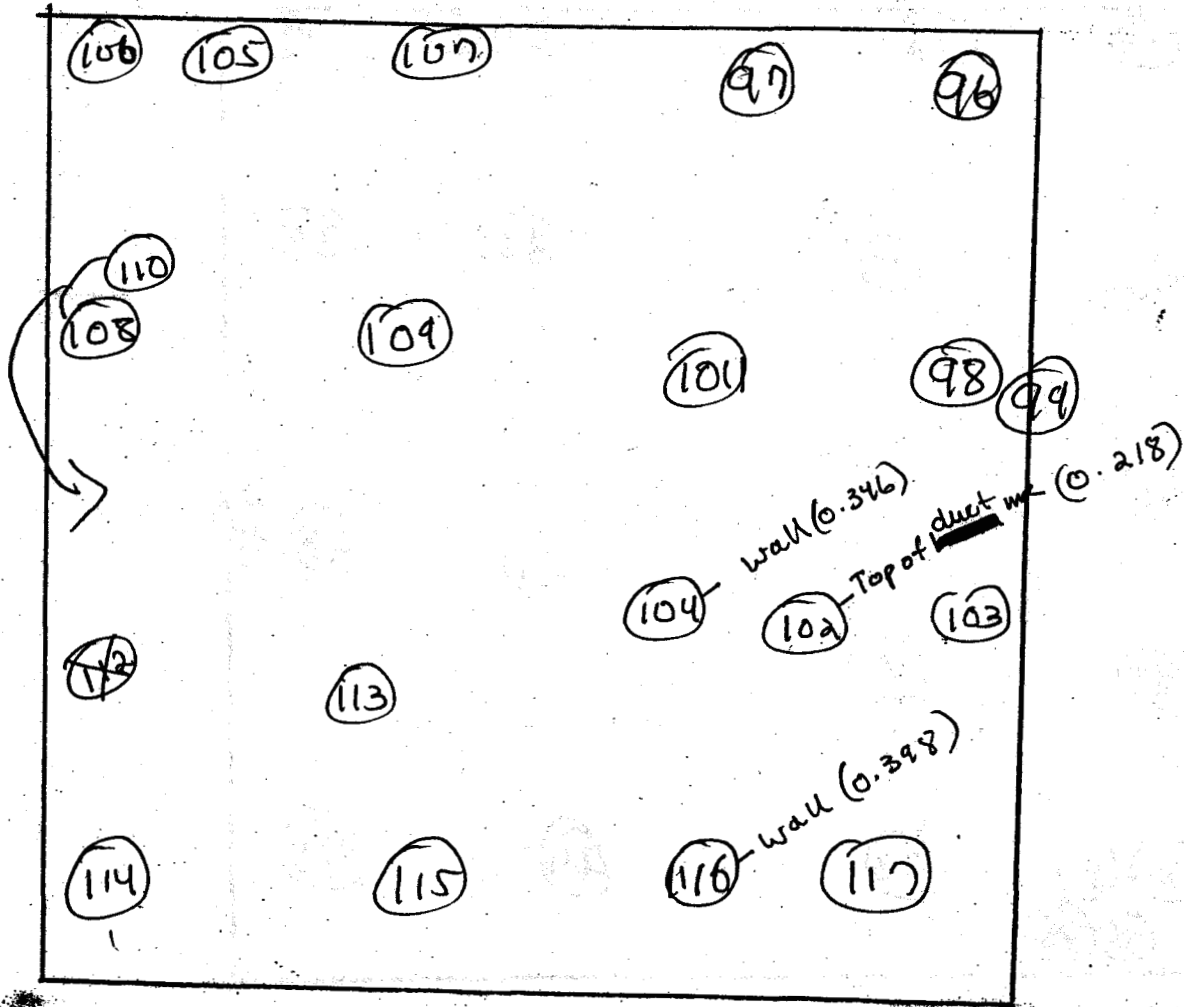
(x) up

Section 20, High Bay, D 865 4/15/03  
Wall



20

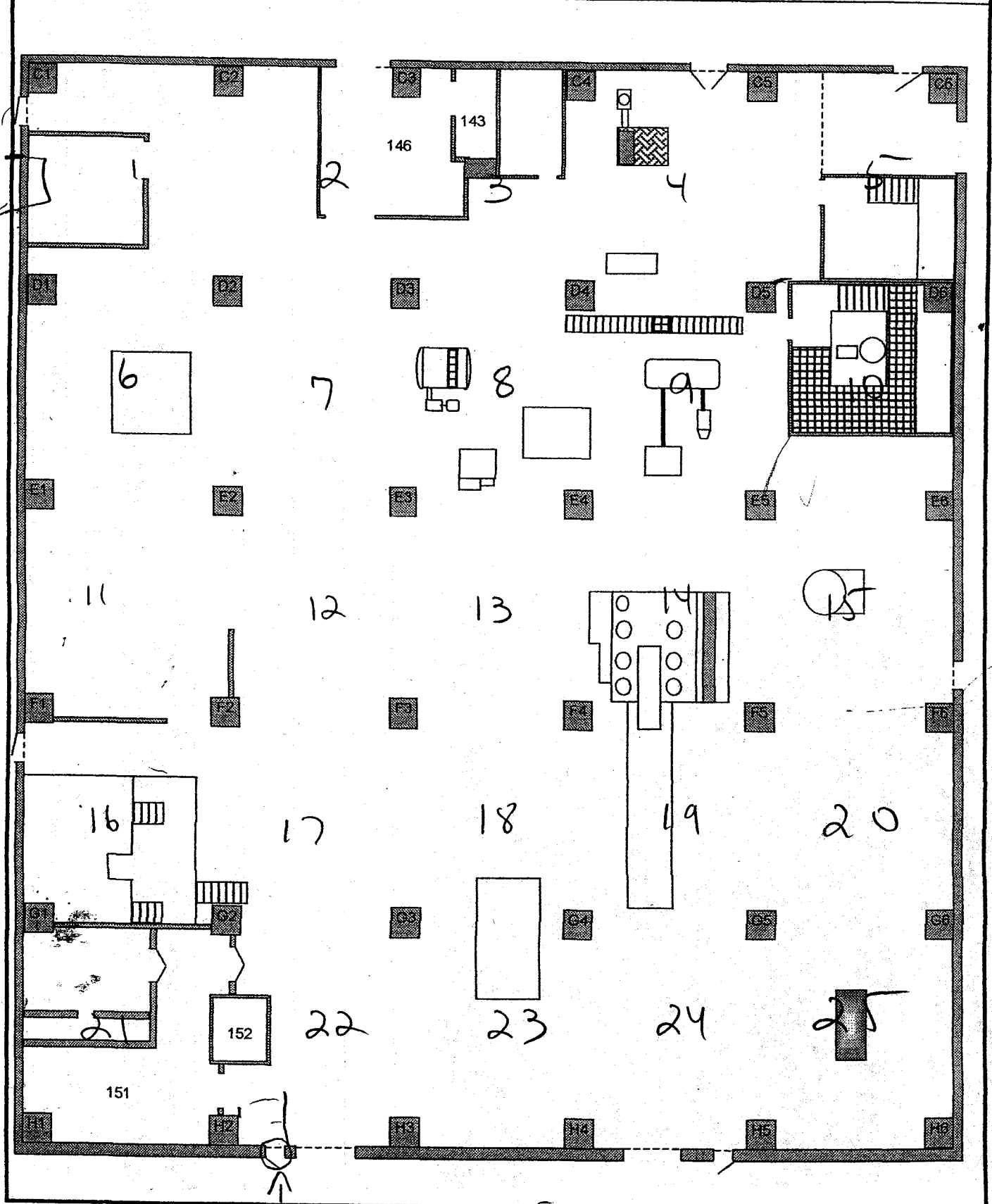
Section 16, High Bay, 13865 4/15/03  
wall



# GRID MAP Building 865

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Drawing Showing Survey Points



**RIN#:**

037-1393

215

Looks like  
fiberglass

**Signature:**

JHA#

AC

1

A

# Industrial Hygiene Information System Surface Sample Report

IHSR\_SURFACE\_SAMPLE

Date: 04/29/2003

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RIN: 03Z1329

Sample Number/Type:	865-04152003-54-001	WIPE	Hygienist:	MIKE RICHEN
Location Info:	TOP BEAM			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	0.7000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-002	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CEILING			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-003	WIPE	Hygienist:	MIKE RICHEN
Location Info:	HOLE IN BEAM			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-004	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CEILING			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-005	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CEILING			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-006	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CEILING			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-007	WIPE	Hygienist:	MIKE RICHEN
Location Info:	ROOF DRAIN			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-008	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CEILING			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-009	WIPE	Hygienist:	MIKE RICHEN
Location Info:	TOP BEAM			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	0.6560 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-010	BLANK	Hygienist:	MIKE RICHEN
Location Info:				
Room No:				
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG			
Sample Number/Type:	865-04152003-54-011	WIPE	Hygienist:	MIKE RICHEN
Location Info:	HOLE IN BEAM			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-012			

DOES NOT CONTAIN  
OFFICIAL USE ONLY INFORMATION

Name/Org: *Shyne/lyh/PRC* Date: *11/5/08*

Directed by: *J.A. Nesheim* DOE M4713-1

# Industrial Hygiene Information System

## Surface Sample Report

IHISR\_SURFACE\_SAMPLE

Date: 04/29/2003

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RIN: 03Z1329

Sample Number/Type:	865-04152003-54-012	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-013	WIPE	Hygienist: MIKE RICHEN
Location Info:	CRACK		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-014	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-015	WIPE	Hygienist: MIKE RICHEN
Location Info:	CRACK		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-016	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-017	WIPE	Hygienist: MIKE RICHEN
Location Info:	HOLE		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-018	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-019	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-020	BLANK	Hygienist: MIKE RICHEN
Location Info:			
Room No:			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG		
Sample Number/Type:	865-04152003-54-021	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-022	WIPE	Hygienist: MIKE RICHEN
Location Info:	HOLE		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-023	WIPE	Hygienist: MIKE RICHEN

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# Industrial Hygiene Information System

## Surface Sample Report

IHSR\_SURFACE\_SAMPLE

Date: 04/29/2003

Page: 3 of 11

RIN: 03Z1329

Sample Number/Type:	865-04152003-54-023	WIPE	Hygienist:	MIKE RICHEN
Location Info:	"U" HANGER COMPOSITE			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	0.1670 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-024	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CEILING			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-025	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CRACK			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-026	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CEILING			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-027	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CEILING			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-028	BLANK	Hygienist:	MIKE RICHEN
Location Info:				
Room No:				
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG			
Sample Number/Type:	865-04152003-54-029	BLANK	Hygienist:	MIKE RICHEN
Location Info:				
Room No:				
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG			
Sample Number/Type:	865-04152003-54-030	BLANK	Hygienist:	MIKE RICHEN
Location Info:				
Room No:				
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG			
Sample Number/Type:	865-04152003-54-031	WIPE	Hygienist:	MIKE RICHEN
Location Info:	TOP BEAM			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-032	WIPE	Hygienist:	MIKE RICHEN
Location Info:	CEILING			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-033	WIPE	Hygienist:	MIKE RICHEN
Location Info:	HOLE			
Room No:	HIGH BAY			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)			
Concentration:	< 0.1000 _ UG/100CM2			
Sample Number/Type:	865-04152003-54-035	WIPE	Hygienist:	MIKE RICHEN

# Industrial Hygiene Information System

## Surface Sample Report

IHISR\_SURFACE\_SAMPLE

Date: 04/29/2003

Page: 4 of 11

RIN: 03Z1329

Sample Number/Type:	865-04152003-54-035	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-036	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-037	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-038	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-039	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-040	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-041	WIPE	Hygienist: MIKE RICHEN
Location Info:	TOP BEAM		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-042	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-043	WIPE	Hygienist: MIKE RICHEN
Location Info:	HANGER		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	0.1430 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-044	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-045	WIPE	Hygienist: MIKE RICHEN
Location Info:	CRACK		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-046	WIPE	Hygienist: MIKE RICHEN

# Industrial Hygiene Information System

## Surface Sample Report

IHISR\_SURFACE\_SAMPLE

Date: 04/29/2003

Page: 5 of 11

RIN: 03Z1329

Sample Number/Type:	865-04152003-54-046	WIPE	Hygienist: MIKE RICHEN
Location Info:	ROOF DRAIN		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-047	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-048	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-049	WIPE	Hygienist: MIKE RICHEN
Location Info:	TOP BEAM		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-050	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-051	WIPE	Hygienist: MIKE RICHEN
Location Info:	CRACK		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-052	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-053	WIPE	Hygienist: MIKE RICHEN
Location Info:	HOLE		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-054	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-055	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-056	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-057	WIPE	Hygienist: MIKE RICHEN

# Industrial Hygiene Information System

## Surface Sample Report

IHSR\_SURFACE\_SAMPLE

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RIN: 03Z1329

Sample Number/Type: 865-04152003-54-057      WIPE      Hygienist: MIKE RICHEN  
Location Info: CEILING  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-058      BLANK      Hygienist: MIKE RICHEN  
Location Info:  
Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG

Sample Number/Type: 865-04152003-54-059      BLANK      Hygienist: MIKE RICHEN  
Location Info:  
Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG

Sample Number/Type: 865-04152003-54-060      BLANK      Hygienist: MIKE RICHEN  
Location Info:  
Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG

Sample Number/Type: 865-04152003-54-061      WIPE      Hygienist: MIKE RICHEN  
Location Info: CEILING  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-062      WIPE      Hygienist: MIKE RICHEN  
Location Info: CEILING  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-063      WIPE      Hygienist: MIKE RICHEN  
Location Info: HOLE  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-064      WIPE      Hygienist: MIKE RICHEN  
Location Info: CREVICE/CRACK  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-065      WIPE      Hygienist: MIKE RICHEN  
Location Info: CEILING  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-066      WIPE      Hygienist: MIKE RICHEN  
Location Info: CEILING  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-067      WIPE      Hygienist: MIKE RICHEN  
Location Info: CEILING  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-068      WIPE      Hygienist: MIKE RICHEN

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# Industrial Hygiene Information System

## Surface Sample Report

IHISR\_SURFACE\_SAMPLE

Date: 04/29/2003

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RIN: 03Z1329

Sample Number/Type:	865-04152003-54-068	WIPE	Hygienist: MIKE RICHEN
Location Info:	BEAM		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-069	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-070	BLANK	Hygienist: MIKE RICHEN
Location Info:			
Room No:			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG		
Sample Number/Type:	865-04152003-54-071	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING BY HOUSE VAC LINE		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-072	WIPE	Hygienist: MIKE RICHEN
Location Info:	CRACK		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-073	WIPE	Hygienist: MIKE RICHEN
Location Info:	CEILING		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-074	WIPE	Hygienist: MIKE RICHEN
Location Info:	TOP BEAM		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-075	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-076	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-077	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-078	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-079	WIPE	Hygienist: MIKE RICHEN

# Industrial Hygiene Information System

## Surface Sample Report

IHSR\_SURFACE\_SAMPLE

Date: 04/29/2003

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RIN: 03Z1329

Sample Number/Type:	865-04152003-54-079	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-080	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-081	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-082	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-083	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-084	WIPE	Hygienist: MIKE RICHEN
Location Info:	HANGER		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-085	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-086	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-087	WIPE	Hygienist: MIKE RICHEN
Location Info:	CUT OUT, BARE WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-088	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-089	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-090	BLANK	Hygienist: MIKE RICHEN

# Industrial Hygiene Information System

## Surface Sample Report

IHSR\_SURFACE\_SAMPLE

Date: 04/29/2003

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RIN: 03Z1329

Sample Number/Type: 865-04152003-54-090 BLANK Hygienist: MIKE RICHEN  
Location Info:  
Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG

Sample Number/Type: 865-04152003-54-091 WIPE Hygienist: MIKE RICHEN  
Location Info: WALL  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-092 WIPE Hygienist: MIKE RICHEN  
Location Info: WALL  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-093 WIPE Hygienist: MIKE RICHEN  
Location Info: BEAM, N SIDE  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-094 WIPE Hygienist: MIKE RICHEN  
Location Info: WALL  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-095 WIPE Hygienist: MIKE RICHEN  
Location Info: WALL  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-096 WIPE Hygienist: MIKE RICHEN  
Location Info: WALL  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-097 WIPE Hygienist: MIKE RICHEN  
Location Info: WALL  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-098 WIPE Hygienist: MIKE RICHEN  
Location Info: WALL  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-099 WIPE Hygienist: MIKE RICHEN  
Location Info: UNDER FIBERGLASS  
Room No: HIGH BAY

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG/100CM2

Sample Number/Type: 865-04152003-54-100 BLANK Hygienist: MIKE RICHEN  
Location Info:  
Room No:

Analyte: BERYLLIUM AND BE COMPOUNDS (AS BE)  
Concentration: < 0.1000 \_ UG

Sample Number/Type: 865-04152003-54-101 WIPE Hygienist: MIKE RICHEN

# Industrial Hygiene Information System

## Surface Sample Report

IHISR\_SURFACE\_SAMPLE

Date: 04/29/2003

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RIN: 03Z1329

Sample Number/Type:	865-04152003-54-101	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-102	WIPE	Hygienist: MIKE RICHEN
Location Info:	TOP OF BEAM		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	0.2180 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-103	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-104	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	0.3460 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-105	WIPE	Hygienist: MIKE RICHEN
Location Info:	TOP OF DUCT		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-106	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-107	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-108	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-109	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-110	WIPE	Hygienist: MIKE RICHEN
Location Info:	BRACKET		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-112	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-113	WIPE	Hygienist: MIKE RICHEN

# Industrial Hygiene Information System

## Surface Sample Report

IHISR\_SURFACE\_SAMPLE

Date: 04/29/2003

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RIN: 03Z1329

Sample Number/Type:	865-04152003-54-113	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-114	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-115	WIPE	Hygienist: MIKE RICHEN
Location Info:	WALL		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-116	WIPE	Hygienist: MIKE RICHEN
Location Info:	DOOR		
Room No:	HIGH BAY		
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	0.3980 _ UG/100CM2		
Sample Number/Type:	865-04152003-54-117	BLANK	Hygienist: MIKE RICHEN
Location Info:			
Room No:			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG		
Sample Number/Type:	865-04152003-54-118	BLANK	Hygienist: MIKE RICHEN
Location Info:			
Room No:			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG		
Sample Number/Type:	865-04152003-54-119	BLANK	Hygienist: MIKE RICHEN
Location Info:			
Room No:			
Analyte:	BERYLLIUM AND BE COMPOUNDS (AS BE)		
Concentration:	< 0.1000 _ UG		

Sample Prefix:

865 ,04152003 54

RIN #:

03Z1329

Sampler (print)

Employee #:

Signature: *AWL*

Bldg. - Date - IH#

Example: 865-09022000-310

IWCP#:

Sample Sequence #	Room	Point on survey map	Description	Notes (ie deviations from 100cm <sup>2</sup> )
1	high bay	1	Top beam	
2		2	Ceiling	
3		3	Hole in beam	
4		4	Ceiling	
5		5	"	
6		6	"	
7		7	Roof drain	
8		8	Ceiling	
9		9	Top beam	
10			Blank	
11		11	Hole in beam	
12		12	Ceiling	
13		13	Crack	
14		14	Ceiling	
15		15	Crack	
16		16	Ceiling	
17		17	Hole	

Checked By (print/sign):

Empl #:

Date:

Shaded area = 100cm<sup>2</sup>

0.70mg

0.656mg

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# Rocky Flats Environmental Technology Site Beryllium Wipe Sample Log

Page 2 of 2

Sample Prefix:

865\_04152003 54

RIN #:

03Z

Bldg. - Date - IH#

Example: 865-09022000-310

IWCP#:

Sampler (print):

Employee #:

Signature:

WA

Sample Sequence #	Room	Point on survey map	Description	Notes (ie deviations from 100cm <sup>2</sup> )
103	High bay	103	wall	
104		104	"	
105		105	Top of duct	
106		106	wall	
107		107	"	
108		108	"	
109		109	"	
110		110	Bracket	
111		111	No Sample	
112		113	wall	
113		114	"	
114		115	"	
115		116	"	
116		117	Door	
117			Blau	
118			"	
119			"	

0.346 ug

0.398 ug

0.348 ug

WA 4/24/03

Checked By (print/sign):

Empl. #:

Date:

Shaded area = 100cm<sup>2</sup>

## Rocky Flats Environmental Technology Site Beryllium Wipe Sample Log

Sample Prefix:

865 ,04152003 54

RIN #:

03Z

Bldg. - Date - IH#

Example: 865-09022000-310

IWCP#:

Page 6 of 7

Sampler (print)

Employee #

Signature: WL

Sample Sequence #	Room	Point on survey map	Description	Notes (ie deviations from 100cm <sup>2</sup> )
86	Highway	86	Wall	
87		87	Cut out bare wall	
88		88	Wall	
89		89	"	
90			Blank	
91		91	Wall	
92		92	"	
93		93	Beam, N side	
94		94	Wall	
95		95	"	
96		96	"	
97		97	"	
98		98	"	
99		99	Under fiberglass	
100			Blank	
101		101	Wall	
102		102	Top of beam	

Checked By (print/sign):

Empl. #:

Date:

Shaded area = 100cm<sup>2</sup>

0.218mg

Rocky Flats Environmental Technology Site Beryllium Wipe Sample Log

Sample Prefix:

865 ,04152003 54

RIN #:

03Z

Bldg. - Date - IH#

Example: 865-09022000-310

IWCP#:

Sampler (print)

Employee #

Signature: *WJ*

Sample Sequence #	Room	Point on survey map	Description	Notes (ie deviations from 100cm <sup>2</sup> )
69	High Bay	69	Ceiling	
70			Blank	
71		70	Ceiling by House Vac Line	
72		71	Crack	
73		72	Ceiling	
74		73	Top Beam	
75		74	Wall	
76		75	"	
77		76	"	
78		77	"	
79		78	"	
80		80	"	
81		81	"	
82		82	"	
83		83	"	
84		84	Hanger	
85		85	Wall	

next survey -> 3rd

6/10/03

# Rocky Flats Environmental Technology Site Beryllium Wipe Sample Log

Sample Prefix:

RIN #:

865 ,04152003 54

03Z

Bldg. -

Date -

IH#

Example: 865-09022000-310

IWCP#:

Sampler (print):

Employee #:

Signature: *W*

Sample Sequence #	Room	Point on survey map	Description	Notes (ie deviations from 100cm <sup>2</sup> )
52	High Bay	S2	Ceiling	
53		S3	Hole	
54		S4	Ceiling	
55		S5	"	
56		S6	"	
57		S7	"	
58		S8	Blank	
59		S9	"	
60		S10	"	
61		S11	Ceiling	
62		S12	"	
63		S13	Hole	
64		S14	Crevices, Gull	
65		S15	Ceiling	
66		S16	"	
67		S17	"	
68		S18	Beam	

Checked By (print/sign):

Empl. #:

Date:

Shaded area = 100cm<sup>2</sup>

# Rocky Flats Environmental Technology Site Beryllium Wipe Sample Log

Sample Prefix:

865 ,04152003 54

RIN #:

03Z

Bldg. -

Date -

IH#

Example: 865-09022000-310

IWCP#:

Sampler (print):

Employee #:

Signature: *WM*

Sample Sequence #	Room	Point on survey map	Description	Notes (ie deviations from 100cm <sup>2</sup> )
35	<i>Hg Bay</i>	<i>34</i>	Ceiling	
36		<i>35</i>	"	
37		<i>36</i>	"	
38		<i>37</i>	"	
39		<i>39</i>	"	
40		<i>40</i>	"	
41		<i>41</i>	Top beam	
42		<i>42</i>	Ceiling	
43		<i>43</i>	Hanger	
44		<i>44</i>	Ceiling	
45		<i>45</i>	Crack	
46		<i>46</i>	Roof drain	
47		<i>47</i>	Ceiling	
48		<i>48</i>	"	
49		<i>49</i>	Top Beam	
50		<i>50</i>	Ceiling	
51		<i>51</i>	Crack	

0.143 *mg*

Checked By (print/sign):

Empl. #:

Date:

Shaded area = 100cm<sup>2</sup>

# Rocky Flats Environmental Technology Site Beryllium Wipe Sample Log

Sample Prefix:

865 ,04152003 54

RIN #:

03Z

Bldg. - Date - IH#

Example: 865-09022000-310

IWCP#:

Sampler (print)

Employee

Signature: WV

Sample Sequence #	Room	Point on survey map	Description	Notes (ie deviations from 100cm2)
18	Hi Bay	18	Ceiling	
19		19	"	
20		20	Blank	
21		21	Ceiling	
22		22	hole	
23		23	"U" hanger composite	
24		24	Ceiling	
25		25	Grave	
26		26	Ceiling	
27		27	"	
28		28	Blank	
29		29	"	
30		30	"	
31		31	Top beam	
32		32	Ceiling	
33		33	hole	
34		34	No Sample	

0.167ug

Checked By (print/sign):

Empl. #:

Date:

Shaded area = 100cm2



Johns Manville Corporation  
10100 West Ute Avenue (80127)  
P.O. Box 625005  
Littleton, CO 80162-5005  
Tel: (303) 978-3724

## COVER PAGE

**RECEIVED**  
BY *JM* / DATE *4/29/2003*

April 25, 2003

Sherry Scaggiari  
Rocky Flats Environmental Technology Site  
10808 Highway 93, Unit B  
Golden, CO 80403-8200

Laboratory Report ID: 03042403  
Laboratory Name: Johns Manville IH Lab  
Subcontract Number: KH020005  
RIN: 03Z1329  
Requestor: N. Richen  
P.O./Charge Code: EED50285

Dear Ms. Scaggiari:

The Johns Manville Industrial Hygiene Laboratory has performed the following analytical testing services as requested. The results were calculated based upon the information supplied on the submission form. All laboratory data have been filed and are available upon request. The Johns Manville Laboratory is accredited by the American Industrial Hygiene association (AIHA) in the industrial hygiene program (Certificate #056), and participates in the AIHA ELPAT program.

If you have any questions, please call (303) 978-2584.

I certify that this electronic image, and all hardcopies produced from this image, accurately represents the data and is in compliance with the RFETS specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Sincerely,

Scott Steiner  
Industrial Hygiene Project Manager  
April 25, 2003

April 25, 2003

Laboratory Report ID: 03042403  
Laboratory Name: Johns Manville IH Lab  
Subcontract Number: KH020005  
RIN: 03Z1329  
Requestor: N. Richen  
P.O./Charge Code: EED50285

**Scope of Work:**

Bottle Number(s)	Customer Number(s)	Laboratory ID Number(s)	Line Item Code	Sample Matrix	Instrument Run
03Z1329-001.001	865-04152003-054-001	03042403-001	IH01D104	SWIPE	PB030424-G
03Z1329-002.001	865-04152003-054-002	03042403-002	IH01D104	SWIPE	PB030424-G
03Z1329-003.001	865-04152003-054-003	03042403-003	IH01D104	SWIPE	PB030424-G
03Z1329-004.001	865-04152003-054-004	03042403-004	IH01D104	SWIPE	PB030424-G
03Z1329-005.001	865-04152003-054-005	03042403-005	IH01D104	SWIPE	PB030424-G
03Z1329-006.001	865-04152003-054-006	03042403-006	IH01D104	SWIPE	PB030424-G
03Z1329-007.001	865-04152003-054-007	03042403-007	IH01D104	SWIPE	PB030424-G
03Z1329-008.001	865-04152003-054-008	03042403-008	IH01D104	SWIPE	PB030424-G
03Z1329-009.001	865-04152003-054-009	03042403-009	IH01D104	SWIPE	PB030424-G
03Z1329-010.001	865-04152003-054-010	03042403-010	IH01D104	SWIPE	PB030424-G
03Z1329-011.001	865-04152003-054-011	03042403-011	IH01D104	SWIPE	PB030424-G
03Z1329-012.001	865-04152003-054-012	03042403-012	IH01D104	SWIPE	PB030424-G
03Z1329-013.001	865-04152003-054-013	03042403-013	IH01D104	SWIPE	PB030424-G
03Z1329-014.001	865-04152003-054-014	03042403-014	IH01D104	SWIPE	PB030424-G
03Z1329-015.001	865-04152003-054-015	03042403-015	IH01D104	SWIPE	PB030424-G
03Z1329-016.001	865-04152003-054-016	03042403-016	IH01D104	SWIPE	PB030424-G
03Z1329-017.001	865-04152003-054-017	03042403-017	IH01D104	SWIPE	PB030424-G
03Z1329-018.001	865-04152003-054-018	03042403-018	IH01D104	SWIPE	PB030424-G
03Z1329-019.001	865-04152003-054-019	03042403-019	IH01D104	SWIPE	PB030424-G
03Z1329-020.001	865-04152003-054-020	03042403-020	IH01D104	SWIPE	PB030424-G
03Z1329-021.001	865-04152003-054-021	03042403-021	IH01D104	SWIPE	PB030424-G
03Z1329-022.001	865-04152003-054-022	03042403-022	IH01D104	SWIPE	PB030424-G
03Z1329-023.001	865-04152003-054-023	03042403-023	IH01D104	SWIPE	PB030424-G
03Z1329-024.001	865-04152003-054-024	03042403-024	IH01D104	SWIPE	PB030424-G
03Z1329-025.001	865-04152003-054-025	03042403-025	IH01D104	SWIPE	PB030424-G
03Z1329-026.001	865-04152003-054-026	03042403-026	IH01D104	SWIPE	PB030424-G
03Z1329-027.001	865-04152003-054-027	03042403-027	IH01D104	SWIPE	PB030424-G
03Z1329-028.001	865-04152003-054-028	03042403-028	IH01D104	SWIPE	PB030424-G
03Z1329-029.001	865-04152003-054-029	03042403-029	IH01D104	SWIPE	PB030424-G
03Z1329-030.001	865-04152003-054-030	03042403-030	IH01D104	SWIPE	PB030424-G
03Z1329-031.001	865-04152003-054-031	03042403-031	IH01D104	SWIPE	PB030424-G
03Z1329-032.001	865-04152003-054-032	03042403-032	IH01D104	SWIPE	PB030424-G
03Z1329-033.001	865-04152003-054-033	03042403-033	IH01D104	SWIPE	PB030424-G
03Z1329-034.001	865-04152003-054-035	03042403-034	IH01D104	SWIPE	PB030424-G
03Z1329-035.001	865-04152003-054-036	03042403-035	IH01D104	SWIPE	PB030424-G
03Z1329-036.001	865-04152003-054-037	03042403-036	IH01D104	SWIPE	PB030424-G
03Z1329-037.001	865-04152003-054-038	03042403-037	IH01D104	SWIPE	PB030424-G
03Z1329-038.001	865-04152003-054-038	03042403-038	IH01D104	SWIPE	PB030424-G

April 25, 2003

Laboratory Report ID: 03042403  
Laboratory Name: Johns Manville IH Lab  
Subcontract Number: KH020005  
RIN: 03Z1329  
Requestor: N. Richen  
P.O./Charge Code: EED50285

Scope of Work:

Bottle Number(s)	Customer Number(s)	Laboratory ID Number(s)	Line Item Code	Sample Matrix	Instrument Run
03Z1329-039.001	865-04152003-054-040	03042403-039	IH01D104	SWIPE	PB030424-G
03Z1329-040.001	865-04152003-054-041	03042403-040	IH01D104	SWIPE	PB030424-G
03Z1329-041.001	865-04152003-054-042	03042403-041	IH01D104	SWIPE	PB030424-G
03Z1329-042.001	865-04152003-054-043	03042403-042	IH01D104	SWIPE	PB030424-G
03Z1329-043.001	865-04152003-054-044	03042403-043	IH01D104	SWIPE	PB030424-G
03Z1329-044.001	865-04152003-054-045	03042403-044	IH01D104	SWIPE	PB030424-G
03Z1329-045.001	865-04152003-054-046	03042403-045	IH01D104	SWIPE	PB030424-G
03Z1329-046.001	865-04152003-054-047	03042403-046	IH01D104	SWIPE	PB030424-G
03Z1329-047.001	865-04152003-054-048	03042403-047	IH01D104	SWIPE	PB030424-G
03Z1329-048.001	865-04152003-054-049	03042403-048	IH01D104	SWIPE	PB030424-G
03Z1329-049.001	865-04152003-054-050	03042403-049	IH01D104	SWIPE	PB030424-G
03Z1329-050.001	865-04152003-054-051	03042403-050	IH01D104	SWIPE	PB030424-G
03Z1329-051.001	865-04152003-054-052	03042403-051	IH01D104	SWIPE	PB030424-G
03Z1329-052.001	865-04152003-054-053	03042403-052	IH01D104	SWIPE	PB030424-G
03Z1329-053.001	865-04152003-054-054	03042403-053	IH01D104	SWIPE	PB030424-G
03Z1329-054.001	865-04152003-054-055	03042403-054	IH01D104	SWIPE	PB030424-G
03Z1329-055.001	865-04152003-054-056	03042403-055	IH01D104	SWIPE	PB030424-G
03Z1329-056.001	865-04152003-054-057	03042403-056	IH01D104	SWIPE	PB030424-G
03Z1329-057.001	865-04152003-054-058	03042403-057	IH01D104	SWIPE	PB030424-G
03Z1329-058.001	865-04152003-054-059	03042403-058	IH01D104	SWIPE	PB030424-G
03Z1329-059.001	865-04152003-054-060	03042403-059	IH01D104	SWIPE	PB030424-G
03Z1329-060.001	865-04152003-054-061	03042403-060	IH01D104	SWIPE	PB030424-G
03Z1329-061.001	865-04152003-054-062	03042403-061	IH01D104	SWIPE	PB030424-G
03Z1329-062.001	865-04152003-054-063	03042403-062	IH01D104	SWIPE	PB030424-G
03Z1329-063.001	865-04152003-054-064	03042403-063	IH01D104	SWIPE	PB030424-G
03Z1329-064.001	865-04152003-054-065	03042403-064	IH01D104	SWIPE	PB030424-G
03Z1329-065.001	865-04152003-054-066	03042403-065	IH01D104	SWIPE	PB030424-G
03Z1329-066.001	865-04152003-054-067	03042403-066	IH01D104	SWIPE	PB030424-G
03Z1329-067.001	865-04152003-054-068	03042403-067	IH01D104	SWIPE	PB030424-G
03Z1329-068.001	865-04152003-054-069	03042403-068	IH01D104	SWIPE	PB030424-G
03Z1329-069.001	865-04152003-054-070	03042403-069	IH01D104	SWIPE	PB030424-G
03Z1329-070.001	865-04152003-054-071	03042403-070	IH01D104	SWIPE	PB030424-G
03Z1329-071.001	865-04152003-054-072	03042403-071	IH01D104	SWIPE	PB030424-G
03Z1329-072.001	865-04152003-054-073	03042403-072	IH01D104	SWIPE	PB030424-G
03Z1329-073.001	865-04152003-054-074	03042403-073	IH01D104	SWIPE	PB030424-G
03Z1329-074.001	865-04152003-054-075	03042403-074	IH01D104	SWIPE	PB030424-G
03Z1329-075.001	865-04152003-054-076	03042403-075	IH01D104	SWIPE	PB030424-G
03Z1329-076.001	865-04152003-054-077	03042403-076	IH01D104	SWIPE	PB030424-G

April 25, 2003

Laboratory Report ID: 03042403  
Laboratory Name: Johns Manville IH Lab  
Subcontract Number: KH020005  
RIN: 03Z1329  
Requestor: N. Richen  
P.O./Charge Code: EED50285

**Scope of Work:**

Bottle Number(s)	Customer Number(s)	Laboratory ID Number(s)	Line Item Code	Sample Matrix	Instrument Run
03Z1329-077.001	865-04152003-054-078	03042403-077	IH01D104	SWIPE	PB030424-G
03Z1329-078.001	865-04152003-054-079	03042403-078	IH01D104	SWIPE	PB030424-G
03Z1329-079.001	865-04152003-054-080	03042403-079	IH01D104	SWIPE	PB030424-G
03Z1329-080.001	865-04152003-054-081	03042403-080	IH01D104	SWIPE	PB030424-G
03Z1329-081.001	865-04152003-054-082	03042403-081	IH01D104	SWIPE	PB030425-A
03Z1329-082.001	865-04152003-054-083	03042403-082	IH01D104	SWIPE	PB030425-A
03Z1329-083.001	865-04152003-054-084	03042403-083	IH01D104	SWIPE	PB030425-A
03Z1329-084.001	865-04152003-054-085	03042403-084	IH01D104	SWIPE	PB030425-A
03Z1329-085.001	865-04152003-054-086	03042403-085	IH01D104	SWIPE	PB030425-A
03Z1329-086.001	865-04152003-054-087	03042403-086	IH01D104	SWIPE	PB030425-A
03Z1329-087.001	865-04152003-054-088	03042403-087	IH01D104	SWIPE	PB030425-A
03Z1329-088.001	865-04152003-054-089	03042403-088	IH01D104	SWIPE	PB030425-A
03Z1329-089.001	865-04152003-054-090	03042403-089	IH01D104	SWIPE	PB030425-A
03Z1329-090.001	865-04152003-054-091	03042403-090	IH01D104	SWIPE	PB030425-A
03Z1329-091.001	865-04152003-054-092	03042403-091	IH01D104	SWIPE	PB030425-A
03Z1329-092.001	865-04152003-054-093	03042403-092	IH01D104	SWIPE	PB030425-A
03Z1329-093.001	865-04152003-054-094	03042403-093	IH01D104	SWIPE	PB030425-A
03Z1329-094.001	865-04152003-054-095	03042403-094	IH01D104	SWIPE	PB030425-A
03Z1329-095.001	865-04152003-054-096	03042403-095	IH01D104	SWIPE	PB030425-A
03Z1329-096.001	865-04152003-054-097	03042403-096	IH01D104	SWIPE	PB030425-A
03Z1329-097.001	865-04152003-054-098	03042403-097	IH01D104	SWIPE	PB030425-A
03Z1329-098.001	865-04152003-054-099	03042403-098	IH01D104	SWIPE	PB030425-A
03Z1329-099.001	865-04152003-054-100	03042403-099	IH01D104	SWIPE	PB030425-A
03Z1329-100.001	865-04152003-054-101	03042403-100	IH01D104	SWIPE	PB030425-A
03Z1329-101.001	865-04152003-054-102	03042403-101	IH01D104	SWIPE	PB030425-A
03Z1329-102.001	865-04152003-054-103	03042403-102	IH01D104	SWIPE	PB030425-A
03Z1329-103.001	865-04152003-054-104	03042403-103	IH01D104	SWIPE	PB030425-A
03Z1329-104.001	865-04152003-054-105	03042403-104	IH01D104	SWIPE	PB030425-A
03Z1329-105.001	865-04152003-054-106	03042403-105	IH01D104	SWIPE	PB030425-A
03Z1329-106.001	865-04152003-054-107	03042403-106	IH01D104	SWIPE	PB030425-A
03Z1329-107.001	865-04152003-054-108	03042403-107	IH01D104	SWIPE	PB030425-A
03Z1329-108.001	865-04152003-054-109	03042403-108	IH01D104	SWIPE	PB030425-A
03Z1329-109.001	865-04152003-054-110	03042403-109	IH01D104	SWIPE	PB030425-A
03Z1329-110.001	865-04152003-054-112	03042403-110	IH01D104	SWIPE	PB030425-A
03Z1329-111.001	865-04152003-054-113	03042403-111	IH01D104	SWIPE	PB030425-A
03Z1329-112.001	865-04152003-054-114	03042403-112	IH01D104	SWIPE	PB030425-A
03Z1329-113.001	865-04152003-054-115	03042403-113	IH01D104	SWIPE	PB030425-A
03Z1329-114.001	865-04152003-054-116	03042403-114	IH01D104	SWIPE	PB030425-A

April 25, 2003

**Laboratory Report ID:** 03042403  
**Laboratory Name:** Johns Manville IH Lab  
**Subcontract Number:** KH020005  
**RIN:** 03Z1329  
**Requestor:** N. Richen  
**P.O./Charge Code:** EED50285

**Scope of Work:**

Bottle Number(s)	Customer Number(s)	Laboratory ID Number(s)	Line Item Code	Sample Matrix	Instrument Run
03Z1329-115.001	865-04152003-054-117	03042403-115	IH01D104	SWIPE	PB030425-A
03Z1329-116.001	865-04152003-054-118	03042403-116	IH01D104	SWIPE	PB030425-A
03Z1329-117.001	865-04152003-054-119	03042403-117	IH01D104	SWIPE	PB030425-A

**ROCKY FLATS CLOSURE SITE  
SERVICES  
RFETS**

**CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

COC: 03Z1329#001

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete each task.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress regularly to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves assessing the outcomes against the objectives and goals and identifying any areas for improvement.

Sampler(s)	(time/date)	Contact/Requester SCAGGIARI, SHERRY**RICHENM	DUL: 4/25/03	Telephone No. 21557212-3176
RUN		Sampling Origin		Purchase Order/Charge Code EED50285
Project Title B865 BE WIPES		Logbook No.		Temp.
To (Lab) Johns Manville		Method of Shipment		Bill of Lading/Air Bill No.
Protocol		Related COC (if any)		PRE

DATE	TIME	LOCATION	WIND DIRECTION	WIND SPEED	SEA STATE	WEATHER	REMARKS
07-08-69	1000	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	1100	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	1200	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	1300	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	1400	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	1500	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	1600	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	1700	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	1800	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	1900	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2000	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2100	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2200	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2300	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2400	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2500	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2600	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2700	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2800	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	2900	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3000	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3100	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3200	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3300	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3400	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3500	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3600	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3700	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3800	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	3900	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4000	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4100	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4200	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4300	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4400	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4500	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4600	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4700	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4800	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	4900	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5000	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5100	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5200	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5300	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5400	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5500	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5600	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5700	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5800	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	5900	10N 115E	090	10	3	B	DRIFT 0.5 DEG
07-08-69	6000	10N 115E	090	10	3	B	DR

Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES ☒ NO ☐

Are other known hazardous substances present? YES ☒ NO ☐

CFR Part 101-11.5 NO

**SCREENING  
REQUIRED**

SCREENING	SPECIAL INSTRUCTIONS	Hold Time
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Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis [Field-Filtered] LIC (Method TMe) [TAT]/Parameter List	Preservative/ Packing
03Z1329 -001.001	865-04152003 - 054-001	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -002.001	865-04152003 - 054-002	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -003.001	865-04152003 - 054-003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -004.001	865-04152003 - 054-004	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -005.001	865-04152003 - 054-005	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -006.001	865-04152003 - 054-006	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -007.001	865-04152003 - 054-007	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -008.001	865-04152003 - 054-008	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -009.001	865-04152003 - 054-009	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A

[illegible]

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)	Disposed By	Date/Time COC printed: 04/22/03 13:22 (Version: coc_r20.rpt)
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**ROCKY FLATS CLOSURE SITE  
SERVICES**

**CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

COC: 03Z1329#001

**Telephone No.**  
**2155/212-3176**

**Contact/Requester**  
**SCAGGIARI, SHERRY\*\*RICHENM**

Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis [Field-Filtered] LIC (Method Title) [TAT]/[Parameter List]	Preservative; Packing
03Z1329 -025.001	865-04152003 - 054-025	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -026.001	865-04152003 - 054-026	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -027.001	865-04152003 - 054-027	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -028.001	865-04152003 - 054-028	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -029.001	865-04152003 - 054-029	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -030.001	865-04152003 - 054-030	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -031.001	865-04152003 - 054-031	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -032.001	865-04152003 - 054-032	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -033.001	865-04152003 - 054-033	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -034.001	865-04152003 - 054-035	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -035.001	865-04152003 - 054-036	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -036.001	865-04152003 - 054-037	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -037.001	865-04152003 - 054-038	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -038.001	865-04152003 - 054-039	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A
03Z1329 -039.001	865-04152003 - 054-040	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] {BERYLLIUM}	N/A; N/A

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
S. Hill	4-23-03/1515	Morgan	4/23/03	1515	R. H. H.	4/23/03	1515
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
S. Hill	4-24-03 0900	Morgan	4-24-03	14-0000	R. H. H.	4/24/03	1105
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
S. Hill	4-24-03 0900	Morgan	4-24-03	14-0000	R. H. H.	4/24/03	1105
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)	Disposed By	Date/Time COC printed: 04/22/03 13:22 (Version:coc_r20.rpt)
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# ROCKY FLATS CLOSURE SITE SERVICES

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

CCG:

03Z1329#001

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KIN		Contact/Requester		Telephone No.			
03Z1329		SCAGGIARI, SHERRY**RICHEM		2155/212-3176			
Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis [Field-Filtered] LJC (Method Title) [TAT]/Parameter List	Preservative: Packing
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-070.001	-054-071					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-071.001	-054-072					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-072.001	-054-073					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-073.001	-054-074					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-074.001	-054-075					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-075.001	-054-076					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-076.001	-054-077					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-077.001	-054-078					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-078.001	-054-079					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-079.001	-054-080					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-080.001	-054-081					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-081.001	-054-082					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-082.001	054-083					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-083.001	-054-084					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs]	N/A
-084.001	-054-085					(BERYLLIUM)	N/A

Requisitioned By:	Date/Time	Received By:	Date/Time	Requisitioned By:	Date/Time	Received By:	Date/Time
4-23-03/1515	4/23/03	4/23/03	1515	4-23-03/1515	4/23/03	4/23/03	1515
4-24-03/0900	4-24-03/0900	4-24-03/0900	0900	4-24-03/0900	4-24-03/0900	4-24-03/0900	0900

Requisitioned By:	Date/Time	Received By:	Date/Time	Requisitioned By:	Date/Time	Received By:	Date/Time
4-23-03/1515	4/23/03	4/23/03	1515	4-23-03/1515	4/23/03	4/23/03	1515
4-24-03/0900	4-24-03/0900	4-24-03/0900	0900	4-24-03/0900	4-24-03/0900	4-24-03/0900	0900

Requisitioned By:	Date/Time	Received By:	Date/Time	Requisitioned By:	Date/Time	Received By:	Date/Time
4-23-03/1515	4/23/03	4/23/03	1515	4-23-03/1515	4/23/03	4/23/03	1515
4-24-03/0900	4-24-03/0900	4-24-03/0900	0900	4-24-03/0900	4-24-03/0900	4-24-03/0900	0900

Requisitioned By:	Date/Time	Received By:	Date/Time	Requisitioned By:	Date/Time	Received By:	Date/Time
4-23-03/1515	4/23/03	4/23/03	1515	4-23-03/1515	4/23/03	4/23/03	1515
4-24-03/0900	4-24-03/0900	4-24-03/0900	0900	4-24-03/0900	4-24-03/0900	4-24-03/0900	0900

Requisitioned By:	Date/Time	Received By:	Date/Time	Requisitioned By:	Date/Time	Received By:	Date/Time
4-23-03/1515	4/23/03	4/23/03	1515	4-23-03/1515	4/23/03	4/23/03	1515
4-24-0							

# ROCKY FLATS CLOSURE SITE SERVICES

## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COC:

0321329#001

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RFTS

RIN 0321329

Contact/Requester SCAGGIARI, SHERRY-RICHENM

Telephone No. 2155/212-3176

0321329

Customer Number

Matrix

Date/Time

Location

Container (size/type)

Field Filtered] LIC (Method Title) [TAT/Parameter List]

Preservative; Packing

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

0321329

865-04152003

SURFACE

Room(s): HIGH BAY

Room(s): HIGH BAY

1-SAMPL E

IN01D104 (OSHA 125/ICP-AES De Filters Swipe (Wh..)) [24hrs]

N/A

FINAL SAMPLE DISPOSITION

Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)

Disposed By

Date/Time COC printed: 04/22/03 13:22 (Version:coc\_J20.rpt)

# ROCKY FLATS CLOSURE SITE SERVICES REFETS

## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COC:

03Z1329#001

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RIN 03Z1329

Contact/Requester SCAGGIARI, SHERRY\*\*RICHEINI

Telephone No. 215/212-3176

Sample Analysis [Field-Filtered] L/C (Method Title) [TAT]/Parameter List

Preservative; Packing

Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Field-Filtered L/C (Method Title) [TAT]/Parameter List	Preservative; Packing
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-100.001	-054-101					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-101.001	-054-102					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-102.001	-054-103					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-103.001	-054-104					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-104.001	-054-105					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-105.001	-054-106					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-106.001	-054-107					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-107.001	-054-108					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-108.001	-054-109					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-109.001	-054-110					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-110.001	-054-112					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-111.001	-054-113					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-112.001	-054-114					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-113.001	-054-115					(BERYLLIUM)	N/A
03Z1329	865-04152003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	IR01D104 (OSHA 125/ICP-AES Be Filters Sw/dpe (Wh..)) [24hrs]	N/A
-114.001	-054-116					(BERYLLIUM)	N/A

Relinquished By: J. Miller Date/Time: 4-23-03 1515 Received By: J. Miller Date/Time: 4-23-03 1515

Relinquished By: J. Miller Date/Time: 4-24-03 0900 Received By: J. Miller Date/Time: 4-24-03 0900

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Relinquished By: J. Miller Date/Time: 4-24-03 0900 Received By: J. Miller Date/Time: 4-24-03 0900



## NARRATIVE

The laboratory did not encounter any problems or questions associated with the receipt of samples into the laboratory. All samples identified on the Chain-of-Custody (COC) form were received and accepted in good condition with tamper-resistant seals intact.

Whatman 4 or Whatman 41 swipe samples were submitted in this project and analyzed for the identification and quantitation of beryllium in accordance with Line Item Code (LIC), IH01D104. The methodology does not define any required specific holding times for the compound on the sampling media. Results of the sample analyses were generated and reported by the specified turn-around time (TAT).

The laboratory preparation of samples in this project was performed following laboratory Standard Operating Procedure (SOP), IH M-1.02, Revision N. Additional references to the preparation technique of this sample type are addressed in EPA Method, 3015A and CEM Application Procedure, MS-9. The samples were prepared using the CEM Microwave Sample Preparation System, Model MDS 2000. The instrumental sample analysis for these samples follows SOP, IH M-1.04, Revision N, which covers the analytical procedure outlined in OSHA method, ID-125G. Start-up and calibration of the Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) instrument are performed following manufacturer's instructions and are addressed in SOP, IH M-1.03, Revision N.

Results of all calibration verifications (initial and continuing), method blanks (calibration and matrix), Laboratory Control Samples (LCSs), Laboratory Control Sample Duplicates (LCDs) and internal QA/QC program monitoring standards for this analytical batch are within acceptable limits as specified in Statement of Work (SOW) module, IH01-D.3. ✓

The internal quality control procedures for statistical monitoring of analytical data to ensure the production of quality results with continuing high validity are addressed in the JMTC IH Laboratory Quality Assurance Manual, Section 10.0. Results of all method-specific QC assessments for this analytical batch are within acceptable limits in accordance with SOW module, IH01-D.3.

The Instrument Detection Limit (IDL) has been determined to be 0.00028 µg/ml using the ICP-AES instrument, Perkin Elmer - Optima model 3000DV. Method Detection Limit (MDL) determinations are performed in accordance with the EPA Method contained in 40 CFR Part 136, Appendix B. The MDL for beryllium on the Whatman swipe matrix by ICP-AES has been determined to be 0.012 µg/swipe. These values meet the required detection limits for SOW module, IH01-D.3. The sample batch did not require any sample re-analyses due to dilutions or any anomalies. The qualifiers used for the results page are "U" for non-detect and "J" for levels greater than the MDL, but less than the Reporting Limit.

The JMTC IH Analytical Laboratory is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program (Certificate N. 056) and continues to rate proficient within the Proficiency Analytical Testing (PAT) program. This program is designed for laboratories involved in analyzing samples taken in the workplace environment. The JMTC IH Analytical Laboratory is also accredited in the Environmental Lead Laboratory Accreditation Program (ELLAP), which is recognized by the EPA National Lead Laboratory Accreditation Program (NLLAP). This program accredits and monitors performance of laboratories testing for lead in environmental samples such as paint, soil, dust wipes and air.

April 25, 2003

Laboratory Report ID 03042403  
 Laboratory Name: Johns Manville IH Lab  
 Subcontract Number: KH020005  
 RIN: 03Z1329  
 Requestor: N. Richen  
 P.O./Charge Code: EED50285

## QUICK RESULTS SUMMARY

Customer Number	Laboratory ID Number	Requested Analysis	Reporting Limit	CONCENTRATION			Q	Air Vol or Time	Air Concentration
				Back Section	Front Section	Total			
865-04152003-054-001	03042403-001	Beryllium	0.1 µg			0.700 µg			
865-04152003-054-002	03042403-002	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-003	03042403-003	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-004	03042403-004	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-005	03042403-005	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-006	03042403-006	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-007	03042403-007	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-008	03042403-008	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-009	03042403-009	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-010	03042403-010	Beryllium	0.1 µg			0.656 µg			
865-04152003-054-011	03042403-011	Beryllium	0.1 µg			< 0.1 µg	U	BL	
865-04152003-054-012	03042403-012	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-013	03042403-013	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-014	03042403-014	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-015	03042403-015	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-016	03042403-016	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-017	03042403-017	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-018	03042403-018	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-019	03042403-019	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-020	03042403-020	Beryllium	0.1 µg			< 0.1 µg	U	BL	
865-04152003-054-021	03042403-021	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-022	03042403-022	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-023	03042403-023	Beryllium	0.1 µg			0.167 µg			
865-04152003-054-024	03042403-024	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-025	03042403-025	Beryllium	0.1 µg			< 0.1 µg	U		

April 25, 2003

Laboratory Report ID 03042403  
 Laboratory Name: Johns Manville IH Lab  
 Subcontract Number: KH020005  
 RIN: 03Z1329  
 Requestor: N. Richen  
 P.O./Charge Code: EED50285

## QUICK RESULTS SUMMARY

Customer Number	Laboratory ID Number	Requested Analysis	Reporting Limit	CONCENTRATION			Q	Air Vol or Time	Air Concentration
				Back Section	Front Section	Total			
865-04152003-054-026	03042403-026	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-027	03042403-027	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-028	03042403-028	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-029	03042403-029	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-030	03042403-030	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-031	03042403-031	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-032	03042403-032	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-033	03042403-033	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-035	03042403-034	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-036	03042403-035	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-037	03042403-036	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-038	03042403-037	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-038	03042403-038	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-040	03042403-039	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-041	03042403-040	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-042	03042403-041	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-043	03042403-042	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-044	03042403-043	Beryllium	0.1 µg			0.143 µg			
865-04152003-054-045	03042403-044	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-046	03042403-045	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-047	03042403-046	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-048	03042403-047	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-049	03042403-048	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-050	03042403-049	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-051	03042403-050	Beryllium	0.1 µg			< 0.1 µg	U		

April 25, 2003

Laboratory Report ID 03042403  
 Laboratory Name: Johns Manville IH Lab  
 Subcontract Number: KH020005  
 RIN: 03Z1329  
 Requestor: N. Richen  
 P.O./Charge Code: EED50285

## QUICK RESULTS SUMMARY

Customer Number	Laboratory ID Number	Requested Analysis	Reporting Limit	CONCENTRATION			Q	Air Vol or Time	Air Concentration
				Back Section	Front Section	Total			
865-04152003-054-052	03042403-051	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-053	03042403-052	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-054	03042403-053	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-055	03042403-054	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-056	03042403-055	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-057	03042403-056	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-058	03042403-057	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-059	03042403-058	Beryllium	0.1 µg			<0.1 µg	U	Blc	
865-04152003-054-060	03042403-059	Beryllium	0.1 µg			<0.1 µg	U	"	
865-04152003-054-061	03042403-060	Beryllium	0.1 µg			<0.1 µg	U	"	
865-04152003-054-062	03042403-061	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-063	03042403-062	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-064	03042403-063	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-065	03042403-064	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-066	03042403-065	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-067	03042403-066	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-068	03042403-067	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-069	03042403-068	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-070	03042403-069	Beryllium	0.1 µg			<0.1 µg	U	Blc	
865-04152003-054-071	03042403-070	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-072	03042403-071	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-073	03042403-072	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-074	03042403-073	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-075	03042403-074	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-076	03042403-075	Beryllium	0.1 µg			<0.1 µg	U		

April 25, 2003

Laboratory Report ID 03042403  
 Laboratory Name: Johns Manville IH Lab  
 Subcontract Number: KH020005  
 RIN: 03Z1329  
 Requestor: N. Richen.  
 P.O./Charge Code: EED50285

## QUICK RESULTS SUMMARY

Customer Number	Laboratory ID Number	Requested Analysis	Reporting Limit	CONCENTRATION			Q	Air Vol or Time	Air Concentration
				Back Section	Front Section	Total			
865-04152003-054-077	03042403-076	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-078	03042403-077	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-079	03042403-078	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-080	03042403-079	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-081	03042403-080	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-082	03042403-081	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-083	03042403-082	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-084	03042403-083	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-085	03042403-084	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-086	03042403-085	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-087	03042403-086	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-088	03042403-087	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-089	03042403-088	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-090	03042403-089	Beryllium	0.1 µg			< 0.1 µg	U	Blc	
865-04152003-054-091	03042403-090	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-092	03042403-091	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-093	03042403-092	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-094	03042403-093	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-095	03042403-094	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-096	03042403-095	Beryllium	0.1 µg			< 0.1 µg	U		
865-04152003-054-097	03042403-096	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-098	03042403-097	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-099	03042403-098	Beryllium	0.1 µg			< 0.1 µg	J		
865-04152003-054-100	03042403-099	Beryllium	0.1 µg			< 0.1 µg	U	Blc	
865-04152003-054-101	03042403-100	Beryllium	0.1 µg			< 0.1 µg	J		

April 25, 2003

Laboratory Report ID 03042403  
 Laboratory Name: Johns Manville IH Lab  
 Subcontract Number: KH020005  
 RIN: 03Z1329  
 Requestor: N. Richen  
 P.O./Charge Code: EED50285

## QUICK RESULTS SUMMARY

Customer Number	Laboratory ID Number	Requested Analysis	Reporting Limit	Back Section	CONCENTRATION Front Section	Total	Q	Air Vol or Time	Air Concentration
865-04152003-054-102	03042403-101	Beryllium	0.1 µg			0.218 µg			
865-04152003-054-103	03042403-102	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-104	03042403-103	Beryllium	0.1 µg			0.346 µg			
865-04152003-054-105	03042403-104	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-106	03042403-105	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-107	03042403-106	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-108	03042403-107	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-109	03042403-108	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-110	03042403-109	Beryllium	0.1 µg			<0.1 µg	U		
865-04152003-054-112	03042403-110	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-113	03042403-111	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-114	03042403-112	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-115	03042403-113	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-116	03042403-114	Beryllium	0.1 µg			<0.1 µg	J		
865-04152003-054-117	03042403-115	Beryllium	0.1 µg			0.398 µg			
865-04152003-054-118	03042403-116	Beryllium	0.1 µg			<0.1 µg	U	Blank	
865-04152003-054-119	03042403-117	Beryllium	0.1 µg			<0.1 µg	U	"	

119  
 119  
 108 Sam.  
 119 all Blank 0.1 µg  
 4/24/03

April 25, 2003

Laboratory Report ID: 03042403  
 Laboratory Name: Johns Manville IH Lab  
 Subcontract Number: KH020005  
 RIN: 03Z1329  
 Requestor: N. Richen  
 P.O./Charge Code: EED50285

## QC RESULTS SUMMARY

QC Parameter	QC Item Type	Compound	Expected Recovery	Actual Recovery	Percent Recovery	QC Sample ID	Date Analyzed	Instrument Run
Preparation Blank	PB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank	MB1	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank Spike	MS1	Beryllium	5.0 µg	5.17 µg	103.4		4/25/2003	PB030424-G
Laboratory Control Sample	LC1	Beryllium	1.1 µg	1.14 µg	103.9	QC03032716	4/25/2003	PB030424-G
Laboratory Control Duplicate	LC1a	Beryllium	1.1 µg	1.14 µg	103.3	QC03032716	4/25/2003	PB030424-G
Preparation Blank	PB2	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank	MB2	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank Spike	MS2	Beryllium	5.0 µg	5.22 µg	104.3		4/25/2003	PB030424-G
Laboratory Control Sample	LC2	Beryllium	2.2 µg	2.30 µg	104.6	QC03032717	4/25/2003	PB030424-G
Laboratory Control Duplicate	LC2a	Beryllium	2.2 µg	2.28 µg	103.7	QC03032717	4/25/2003	PB030424-G
Preparation Blank	PB3	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank	MB3	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank Spike	MS3	Beryllium	5.0 µg	5.09 µg	101.8		4/25/2003	PB030424-G
Laboratory Control Sample	LC3	Beryllium	0.9 µg	0.916 µg	101.7	QC03032718	4/25/2003	PB030424-G
Laboratory Control Duplicate	LC3a	Beryllium	0.9 µg	0.926 µg	102.9	QC03032718	4/25/2003	PB030424-G
Preparation Blank	PB4	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank	MB4	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030424-G
Matrix Blank Spike	MS4	Beryllium	5.0 µg	5.19 µg	103.9		4/25/2003	PB030424-G
Laboratory Control Sample	LC4	Beryllium	1.4 µg	1.46 µg	104.1	QC03032719	4/25/2003	PB030424-G
Laboratory Control Duplicate	LC4a	Beryllium	1.4 µg	1.44 µg	103.1	QC03032719	4/25/2003	PB030424-G
Preparation Blank	PB5	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030425-A
Matrix Blank	MB5	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030425-A
Matrix Blank Spike	MS5	Beryllium	5.0 µg	5.00 µg	100.0		4/25/2003	PB030425-A
Laboratory Control Sample	LC5	Beryllium	0.8 µg	0.811 µg	101.4	QC03032725	4/25/2003	PB030425-A
Laboratory Control Duplicate	LC5a	Beryllium	0.8 µg	0.827 µg	103.4	QC03032725	4/25/2003	PB030425-A

April 25, 2003

Laboratory Report ID: 03042403  
Laboratory Name: Johns Manville IH Lab  
Subcontract Number: KH020005  
RIN: 03Z1329  
Requestor: N. Richen  
P.O./Charge Code: EED50285

## QC RESULTS SUMMARY

QC Parameter	QC Item Type	Compound	Expected Recovery	Actual Recovery	Percent Recovery	QC Sample ID	Date Analyzed	Instrument Run
Preparation Blank	PB6	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030425-A
Matrix Blank	MB6	Beryllium	< 0.1 µg	<0.1 µg	N/A		4/25/2003	PB030425-A
Matrix Blank Spike	MS6	Beryllium	5.0 µg	4.96 µg	99.3		4/25/2003	PB030425-A
Laboratory Control Sample	LC6	Beryllium	1.5 µg	1.51 µg	100.4	QC03032726	4/25/2003	PB030425-A
Laboratory Control Duplicate	LC6a	Beryllium	1.5 µg	1.47 µg	97.8	QC03032726	4/25/2003	PB030425-A

ROCKY FLATS CLOSURE SITE  
SERVICES RFETS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COC: 03Z1329#001

Page 1 of 3

Sampler(s)	(time/date)	Contact/Requester SCAGGIARI, SHERRY**RICHENM	Telephone No. 2155/212-3176
RIN 03Z1329		Sampling Origin	Purchase Order/Charge Code EED50285
Project Title E865/BE WIPES		Logbook No.	Ice Chest No.
To (Lab) Johns Manville		Method of Shipment	Temp.
Protocol		Related COC (if any)	Bill of Lading/Air Bill No.
			PRE

POSSIBLE SAMPLE HAZARDS/REMARKS				SCREENING SPECIAL INSTRUCTIONS		Hold Time	
Are acid preserved samples DOT hazardous per 40 CFR Part 136.3 Table II? YES <b>NO</b>				<input type="checkbox"/>			
Are other known hazardous substances present? YES <b>NO</b>							
JAN 11/23/03							
Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis [Field-Filtered] LIC (Method Title) [TAT]/(Parameter List)	Preservative Packing
03Z1329-001.001	865-04152003-054-001	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-002.001	865-04152003-054-002	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-003.001	865-04152003-054-003	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-004.001	865-04152003-054-004	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-005.001	865-04152003-054-005	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-006.001	865-04152003-054-006	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-007.001	865-04152003-054-007	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-008.001	865-04152003-054-008	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-009.001	865-04152003-054-009	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A

Relinquished By: <i>S. Miller</i>	Date/Time: 4-23-03/1515	Received By: <i>Manover</i>	Date/Time: 4/23/03
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)	
		Date/Time COC printed: 04/22/03 13:22 (Version: coc_r20.rp)	

RUN	Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis [Field-Filtered] LIC (Method Title) [TAT]/(Parameter List)	Telephone No.	Preservative; Packing
03Z1329								2155/212-3176	
03Z1329	-010.001	865-04152003 -054-010	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-011.001	865-04152003 -054-011	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-012.001	865-04152003 -054-012	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-013.001	865-04152003 -054-013	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-014.001	865-04152003 -054-014	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-015.001	865-04152003 -054-015	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-016.001	865-04152003 -054-016	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-017.001	865-04152003 -054-017	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-018.001	865-04152003 -054-018	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-019.001	865-04152003 -054-019	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-020.001	865-04152003 -054-020	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-021.001	865-04152003 -054-021	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-022.001	865-04152003 -054-022	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-023.001	865-04152003 -054-023	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
03Z1329	-024.001	865-04152003 -054-024	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)		N/A; N/A
Relinquished By:		Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time		
Relinquished By:		Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time		
Relinquished By:		Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)		Disposed By		Date/Time	COC printed: 04/22/03 13:22 (Version: coc_120.rpt)		

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SERVICES RFETS

COC: 03Z1329#001

Telephone No.  
2155/212-3176

Bottle No.		Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis [Field-Filtered] LIC (Method Title) [TATY/Parameter List]	Preservative Packaging
03Z1329	03Z1329	865-04152003 -054-025	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-026	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-027	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-028	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-029	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-030	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-031	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-032	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-033	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-035	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-036	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-037	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-038	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-039	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329	03Z1329	865-04152003 -054-040	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time	Date/Time
R. Hill	4-23-03/1515	Madura	4/23/03					
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)							Date/Time COC printed: 04/22/03 13:22 (Version: coc_j20.rpt)

ROCKY FLATS CLOSURE SITE  
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CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COC: 03Z1329#001

RIN 03Z1329

4/23/03

SCAGGIARI, SHERRY\*\*RICHENM

Customer Number

Matrix

Date/Time

Location

Container (size/type)

Sample Analysis [Field-Filtered] LIC (Method Title) [TATY/Parameter List]

Preservative Packing

865-04152003 - 054-041	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-042	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-043	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-044	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-045	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-046	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-047	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-048	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-049	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-050	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-051	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-052	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-053	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-054	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
865-04152003 - 054-055	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A

Relinquished By: [Signature]

4-23-03/1515

Received By: [Signature]

4/23/03

Relinquished By: [Signature]

4-23-03/1515

Received By: [Signature]

4/23/03

Relinquished By: [Signature]

4-23-03/1515

Received By: [Signature]

4/23/03

Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)

Disposed By

Date/Time COC printed: 04/22/03 13:22 (Version: coc\_r20.rp)

RIN 03Z1329		Contact/Requester SCAGGIARI, SHERRY RICHENM		Telephone No. 2155/212-3176			
Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis (Field-Filtered) LIC (Method Title) [TAT]/Parameter List	Preservative: Packing
03Z1329-055.001	865-04152003-054-056	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-056.001	865-04152003-054-057	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-057.001	865-04152003-054-058	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-058.001	865-04152003-054-059	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-059.001	865-04152003-054-060	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-060.001	865-04152003-054-061	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-061.001	865-04152003-054-062	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-062.001	865-04152003-054-063	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-063.001	865-04152003-054-064	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-064.001	865-04152003-054-065	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-065.001	865-04152003-054-066	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-066.001	865-04152003-054-067	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-067.001	865-04152003-054-068	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-068.001	865-04152003-054-069	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-069.001	865-04152003-054-070	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh..)) [24hrs] (BERYLLIUM)	N/A; N/A
Relinquished By: S. Hill		Date/Time: 4-23-03/1515	Received By: [Signature]	Date/Time: 4/23/03	Relinquished By:	Date/Time Received By:	Date/Time
Relinquished By:		Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time Received By:	Date/Time
Relinquished By:		Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time Received By:	Date/Time
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)				Date/Time COC printed: 04/22/03 13:22 (Version:coc_r20.rpt)	

ROCKY FLATS CLOSURE SITE  
SERVICES  
RFETS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COC: 03Z1329#001

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RIN 03Z1329

4/23/03

Contact/Requester  
SCAGGIARI, SHERRY\*\*RICHEM

Telephone No.  
2155/212-3176

Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis (Field-Filtered) LIC (Method Title) [TAT]/(Parameter List)	Preservation Packing
03Z1329-070.001	865-04152003-054-071	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-071.001	865-04152003-054-072	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-072.001	865-04152003-054-073	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-073.001	865-04152003-054-074	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-074.001	865-04152003-054-075	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-075.001	865-04152003-054-076	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-076.001	865-04152003-054-077	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-077.001	865-04152003-054-078	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-078.001	865-04152003-054-079	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-079.001	865-04152003-054-080	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-080.001	865-04152003-054-081	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-081.001	865-04152003-054-082	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-082.001	865-04152003-054-083	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-083.001	865-04152003-054-084	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329-084.001	865-04152003-054-085	SURFACE		Room(s): HIGH BAY	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A

Relinquished By: S. Miller

4-23-03/1515

Received By: [Signature]

4/23/03

Relinquished By:

Date/Time

Relinquished By:

Date/Time

Relinquished By:

Date/Time

FINAL SAMPLE DISPOSITION

Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)

Disposed By

Date/Time COC printed: 04/22/03 13:22 (Version: coc\_r20.rtf)

RIN 03Z1329		Contact/Requester SCAGGIARI, SHERRY**RICHEM		Telephone No. 2155/212-3176		Sample Analysis [Field-Filtered] LIC (Method Title) [TAT]/[Parameter List]		Preservative; Packing	
Bottle No.	Customer Number	Matrix	Date/Time	Location	Room(s)	Container (size/type)	Field-Filtered	Method Title	Parameter List
03Z1329-085.001	865-04152003-054-086	SURFACE	4/23/03	HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-086.001	865-04152003-054-087	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-087.001	865-04152003-054-088	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-088.001	865-04152003-054-089	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-089.001	865-04152003-054-090	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-090.001	865-04152003-054-091	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-091.001	865-04152003-054-092	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-092.001	865-04152003-054-093	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-093.001	865-04152003-054-094	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-094.001	865-04152003-054-095	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-095.001	865-04152003-054-096	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-096.001	865-04152003-054-097	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-097.001	865-04152003-054-098	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-098.001	865-04152003-054-099	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
03Z1329-099.001	865-04152003-054-100	SURFACE		HIGH BAY	Room(s): HIGH BAY	1-SAMPL E	TH01D104	OSHA 125/ICP-AES Be Filters Swipe (Wh...)	[24hrs]
Relinquished By: S. Miller		Date/Time: 4-23-03/1515	Received By: [Signature]	Date/Time: 4-23-03/1515	Relinquished By: [Signature]	Date/Time: 4-23-03/1515	Date/Time Received By:		
Relinquished By: [Signature]		Date/Time: [Blank]	Received By: [Blank]	Date/Time: [Blank]	Relinquished By: [Blank]	Date/Time: [Blank]	Date/Time Received By:		
Relinquished By: [Blank]		Date/Time: [Blank]	Received By: [Blank]	Date/Time: [Blank]	Relinquished By: [Blank]	Date/Time: [Blank]	Date/Time Received By:		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)				Date/Time COC printed: 04/22/03 13:22 (Version: coc_r20.rp)			



COCKY FLATS CLOSURE SITE  
SERVICES  
RFETS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COC: 03Z1329#001

Page 9 of 9

RIN 03Z1329

4/23/03

Contact/Requester  
SCAGGIARI, SHERRY RICHENM

Telephone No.  
2155/212-3176

Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis [Field-Filtered] LIC (Method Title) [TAT]/[Parameter List]	Preservative Packing
03Z1329 -115.001	865-04152003 -054-117	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -116.001	865-04152003 -054-118	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A
03Z1329 -117.001	865-04152003 -054-119	SURFACE		Room(s):	1-SAMPL E	TH01D104 (OSHA 125/ICP-AES Be Filters Swipe (Wh...)) [24hrs] (BERYLLIUM)	N/A; N/A

unable to verify contents  
on Rin# 03Z1329  
CB 4/23/03

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
2-7/11	4-23-03/1515	4/23/03	1515				

FINAL SAMPLE  
DISPOSITION

Disposal Method (e.g., returned to customer, disposed of per lab procedure, used in analytical process)

Disposed By

Date/Time COC printed: 04/22/03 13:22 (Version: coc\_120.m)

# COPY

021113-TT30C-D12 Page 1 of 4 03 4/23/03

## ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

INSTRUMENT DATA						Survey type: Contamination	
Mfg. Ludlum	Mfg. Ludlum	Mfg. NE Electra	Building: 865				
Model 2929	Model 2929	Model DP-6	Location: Step off pad trailer				
Serial # 176082	Serial # 176102	Serial # 3248	Purpose: Survey of new plastic bags for swipes				
Cal Due 6-11-03	Cal Due 6-9-03	Cal Due 7-9-03	RWP #: N/A				
Bkg. 0.6 cpm $\alpha$	Bkg. 0.6 cpm $\alpha$	Bkg. 6 cpm $\alpha$	Date: 4-23-03 Time: 1025				
Efficiency 35.5 %	Efficiency 34.4 %	Efficiency 21.4 %					
MDA 18 dpm $\alpha$	MDA 18 dpm $\alpha$	MDA 66 dpm $\alpha$					
Mfg. Ludlum	Mfg. Ludlum	Mfg. NE Electra					
Model 2929	Model 2929	Model DP-6					
Serial # 176082	Serial # 176102	Serial # 3248					
Cal Due 6-11-03	Cal Due 6-9-03	Cal Due 7-9-03					
Bkg. 87.6 cpm $\beta$	Bkg. 71.8 cpm $\beta$	Bkg. 610 cpm $\beta$	RCT: N/A / N/A / N/A				
Efficiency 38.6 %	Efficiency 40.8 %	Efficiency 30.1 %	Print name	Signature	Emp. #		
MDA 205 dpm $\beta$	MDA 205 dpm $\beta$	MDA 391 dpm $\beta$					

PRN/REN #: N/A

Comments Isotope of concern is Depleted Uranium (U-238). Be swipes for gamma spectroscopy are in (4) new plastic bags. Be swipes RIN # 03Z1329.

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe	dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe
1	Front of new bag	<18	<66	<66	<205	<391	<391
2	Back of new bag	<18	<66	<66	<205	<391	<391
3	Front of new bag	<18	<66	<66	<205	<391	<391
4	Back of new bag	<18	<66	<66	<205	<391	<391
5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20	N/A	N/A	N/A	N/A	N/A	N/A	N/A

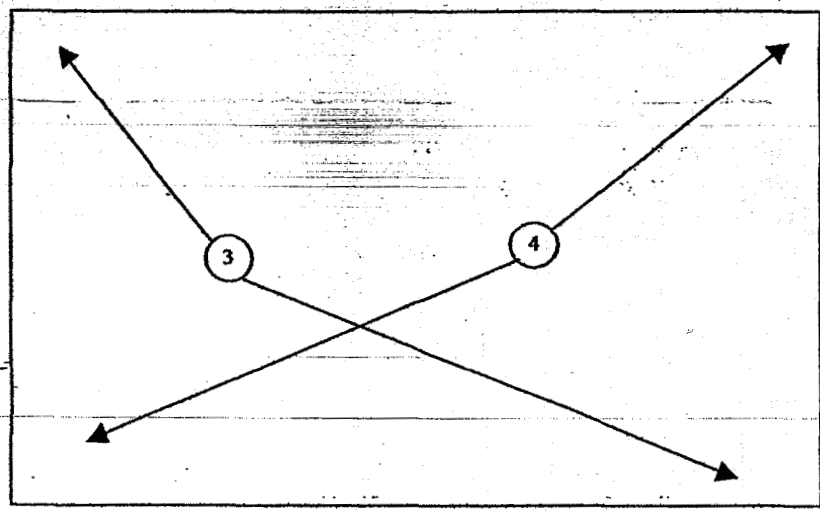
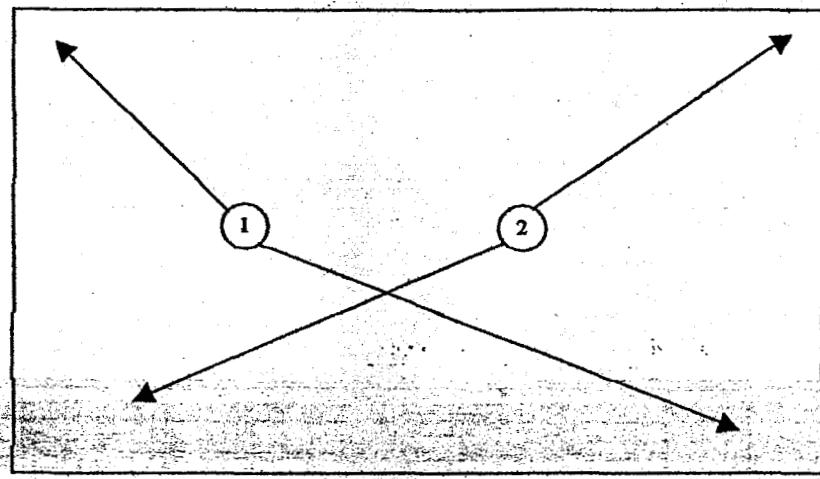
Date Reviewed: 4/23/03 RS Supervision: [Redacted]

Print Name Signature Emp. #

COPY

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

SURVEY DENOTED BELOW IS  
TYPICAL FOR ALL (4) BAGS  
SURVEYED FOR RIN #0321329.



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**INSTRUMENT DATA**

Mfg. Ludlum	Mfg. Ludlum	Mfg. N/A
Model L-2929	Model L-2929	Model
Serial # 176082	Serial # 176102	Serial #
Cal Due 6-11-03	Cal Due 6-9-03	Cal Due
Bkg. 0.6 cpm $\alpha$	Bkg. 0.3 cpm $\alpha$	Bkg.
Eff. 35.5 % $\alpha$	Eff. 34.4 % $\alpha$	Eff.
MDA 18 dpm $\alpha$	MDA 205 dpm $\alpha$	MDA N/A

Mfg. Ludlum	Mfg. Ludlum	Mfg. N/A
Model L-2929	Model L-2929	Model
Serial # 176082	Serial # 176102	Serial #
Cal Due 6-11-03	Cal Due 6-9-03	Cal Due
Bkg. 82.1 cpm $\beta$	Bkg. 70.2 cpm $\beta$	Bkg.
Eff. 38.6 % $\beta$	Eff. 40.8 % $\beta$	Eff.
MDA 205 dpm $\beta$	MDA 205 dpm $\beta$	MDA N/A

02113-T130C-013 Page 3 of 4 08/12/03  
 Survey Type: Contamination Page 1 of 1  
 Building: 865  
 Location: Step-off-Pad  
 Purpose: Release of beryllium wipes from B-865

RWP #: N/A

Date: 4-22-03 Time: 1430

RCT: [Redacted]

RCT: N/A \ N/A \ N/A  
 Print Name Signature Emp. #

PRN/REN #: 02113-T130C-013 RIN: 03Z1329  
 Comments: Isotope of concern is depleted uranium (U-238). Wipe results are denoted below.

**COPY**

**SURVEY RESULTS**

Sample #:	865-04152003-054-001	865-04152003-054-016	865-04152003-054-031	865-04152003-054-046
	865-04152003-054-002	865-04152003-054-017	865-04152003-054-032	865-04152003-054-047
	865-04152003-054-003	865-04152003-054-018	865-04152003-054-033	865-04152003-054-048
	865-04152003-054-004	865-04152003-054-019	865-04152003-054-034	865-04152003-054-049
	865-04152003-054-005	865-04152003-054-020	865-04152003-054-035	865-04152003-054-050
	865-04152003-054-006	865-04152003-054-021	865-04152003-054-036	865-04152003-054-051
	865-04152003-054-007	865-04152003-054-022	865-04152003-054-037	865-04152003-054-052
	865-04152003-054-008	865-04152003-054-023	865-04152003-054-038	865-04152003-054-053
	865-04152003-054-009	865-04152003-054-024	865-04152003-054-039	865-04152003-054-054
	865-04152003-054-010	865-04152003-054-025	865-04152003-054-040	865-04152003-054-055
	865-04152003-054-011	865-04152003-054-026	865-04152003-054-041	865-04152003-054-056
	865-04152003-054-012	865-04152003-054-027	865-04152003-054-042	865-04152003-054-057
	865-04152003-054-013	865-04152003-054-028	865-04152003-054-043	865-04152003-054-058
	865-04152003-054-014	865-04152003-054-029	865-04152003-054-044	865-04152003-054-059
	865-04152003-054-015	865-04152003-054-030	865-04152003-054-045	865-04152003-054-060

#	Location/Description	REMOVABLE		DIRECT	
		DPM/100 CM <sup>2</sup>		DPM/100 CM <sup>2</sup>	
		ALPHA	BETA	ALPHA	BETA
1	Be smear # 001	24	<205	N/A	N/A
2	Be smear # 009	72	<205		
3	All other smears	<18	<205		
4	N/A	N/A	N/A		
5					
6					
7					
8					
9					
10					
11	N/A	N/A	N/A	N/A	N/A

MAP

See beryllium sample log

Date Reviewed: 4/22/03 RS Supervision:

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# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg. Ludlum	Mfg. Ludlum	Mfg. N/A
Model L-2929	Model L-2929	Model
Serial # 176082	Serial # 176102	Serial #
Cal Due 6-11-03	Cal Due 6-9-03	Cal Due
Bkg. 0.6 cpm α	Bkg. 0.3 cpm α	Bkg.
Eff. 35.5 % α	Eff. 34.4 % α	Eff.
MDA 18 dpm α	MDA 205 dpm α	MDA N/A

Mfg. Ludlum	Mfg. Ludlum	Mfg. N/A
Model L-2929	Model L-2929	Model
Serial # 176082	Serial # 176102	Serial #
Cal Due 6-11-03	Cal Due 6-9-03	Cal Due
Bkg. 82.1 cpm β	Bkg. 70.2 cpm β	Bkg.
Eff. 38.6 % β	Eff. 40.8 % β	Eff.
MDA 205 dpm β	MDA 205 dpm β	MDA N/A

02113-T180C-012 Page 4 of 4 (B 4/23/03)

Survey Type: Contamination Page 1 of 1

Building: 865

Location: Step-off Pad

Purpose: Release of beryllium wipes from B-865

RWP #: N/A

Date: 4-22-03 Time: 1430

RC: [Redacted]

RCT: N/A \ N/A \ N/A

Print Name Signature Emp. #

PRN/REN #: 02113-T180C-012

RIN: 03Z1329

Comments: Isotope of concern is depleted uranium (U-238). Wipe results are denoted below.

## SURVEY RESULTS

Sample #:	865-04152003-054-061	865-04152003-054-076	865-04152003-054-091	865-04152003-054-106
	865-04152003-054-062	865-04152003-054-077	865-04152003-054-092	865-04152003-054-107
	865-04152003-054-063	865-04152003-054-078	865-04152003-054-093	865-04152003-054-108
	865-04152003-054-064	865-04152003-054-079	865-04152003-054-094	865-04152003-054-109
	865-04152003-054-065	865-04152003-054-080	865-04152003-054-095	865-04152003-054-110
	865-04152003-054-066	865-04152003-054-081	865-04152003-054-096	865-04152003-054-111
	865-04152003-054-067	865-04152003-054-082	865-04152003-054-097	865-04152003-054-112
	865-04152003-054-068	865-04152003-054-083	865-04152003-054-098	865-04152003-054-113
	865-04152003-054-069	865-04152003-054-084	865-04152003-054-099	865-04152003-054-114
	865-04152003-054-070	865-04152003-054-085	865-04152003-054-100	865-04152003-054-115
	865-04152003-054-071	865-04152003-054-086	865-04152003-054-101	865-04152003-054-116
	865-04152003-054-072	865-04152003-054-087	865-04152003-054-102	865-04152003-054-117
	865-04152003-054-073	865-04152003-054-088	865-04152003-054-103	865-04152003-054-118
	865-04152003-054-074	865-04152003-054-089	865-04152003-054-104	865-04152003-054-119
	865-04152003-054-075	865-04152003-054-090	865-04152003-054-105	N/A

#	Location/Description	REMOVABLE		DIRECT	
		DPM/100 CM <sup>2</sup>		DPM/100 CM <sup>2</sup>	
		ALPHA	BETA	ALPHA	BETA
1	All Be smears	<18	<205	N/A	N/A
2	N/A	N/A	N/A		
3					
4					
5					
6					
7					
8					
9					
10	↓	↓	↓	↓	↓
11	N/A	N/A	N/A	N/A	N/A

MAP

**COPY**

See beryllium sample log

Date Reviewed: 4/22/03

RS Supervision:

## ATTACHMENT D

### Tank 207 Demolition Survey Data

## ATTACHMENT D1

### Tank 207 Pre-Demolition Rad & Be Survey Data

Tank 207

**ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE****INSTRUMENT DATA**

Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NA
Model	2929	Model	2929	Model	
Serial #	147727	Serial #	105885	Serial #	
Cal Due	1/12/03	Cal Due	3/26/03	Cal Due	
Bkg.	0.3 cpm $\alpha$	Bkg.	0.2 cpm $\alpha$	Bkg.	
Efficiency	33.5 %	Efficiency	36.9 %	Efficiency	▼
MDA	18 dpm $\alpha$	MDA	18 dpm $\alpha$	MDA	NA

Survey type: Contamination

Building: 207 Tank

Location: Inside Tank

Purpose: Post Sludge Removal

Prior to fixative

RWP #: 02-RISS-024

Date: 12/13/02 Time: 1000

Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NA
Model	2929	Model	2929	Model	
Serial #	147727	Serial #	105885	Serial #	
Cal Due	1/12/03	Cal Due	3/26/03	Cal Due	
Bkg.	56.0 cpm $\beta$	Bkg.	59.2 cpm $\beta$	Bkg.	
Efficiency	42.9 %	Efficiency	38.3 %	Efficiency	▼
MDA	205 dpm $\alpha$	MDA	205 dpm $\alpha$	MDA	NA

RCT: NA / NA / NA

Print name      Signature      Emp. #

PRN/REN #: NA

Comments: Survey performed following sludge removal.

**SURVEY RESULTS**

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe	dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe
1	Floor	2046	NA	NA	<205	NA	NA
2	Floor	1773			<205		
3	Floor	2532			<205		
4	Floor	2148			<205		
5	Floor	3063			<205		
6	Floor	1440			<205		
7	Floor	1428			<205		
8	Floor	1515			<205		
9	Floor	2625			<205		
10	Floor	2994			<205		
11	Floor	1839			<205		
12	Floor	1965			<205		
13	Floor	2163			<205		
14	Floor	4773			<205		
15	Floor	1959			<205		
16	Floor	2400			<205		
17	Floor	3741			<205		
18	Floor	2118			<205		
19	Floor	2055	▼	▼	<205	▼	▼
20	Floor	2211	NA	NA	<205	NA	NA

Date Reviewed: 12-16-02 RS Supervisor

Print Name

Signature

Emp. #

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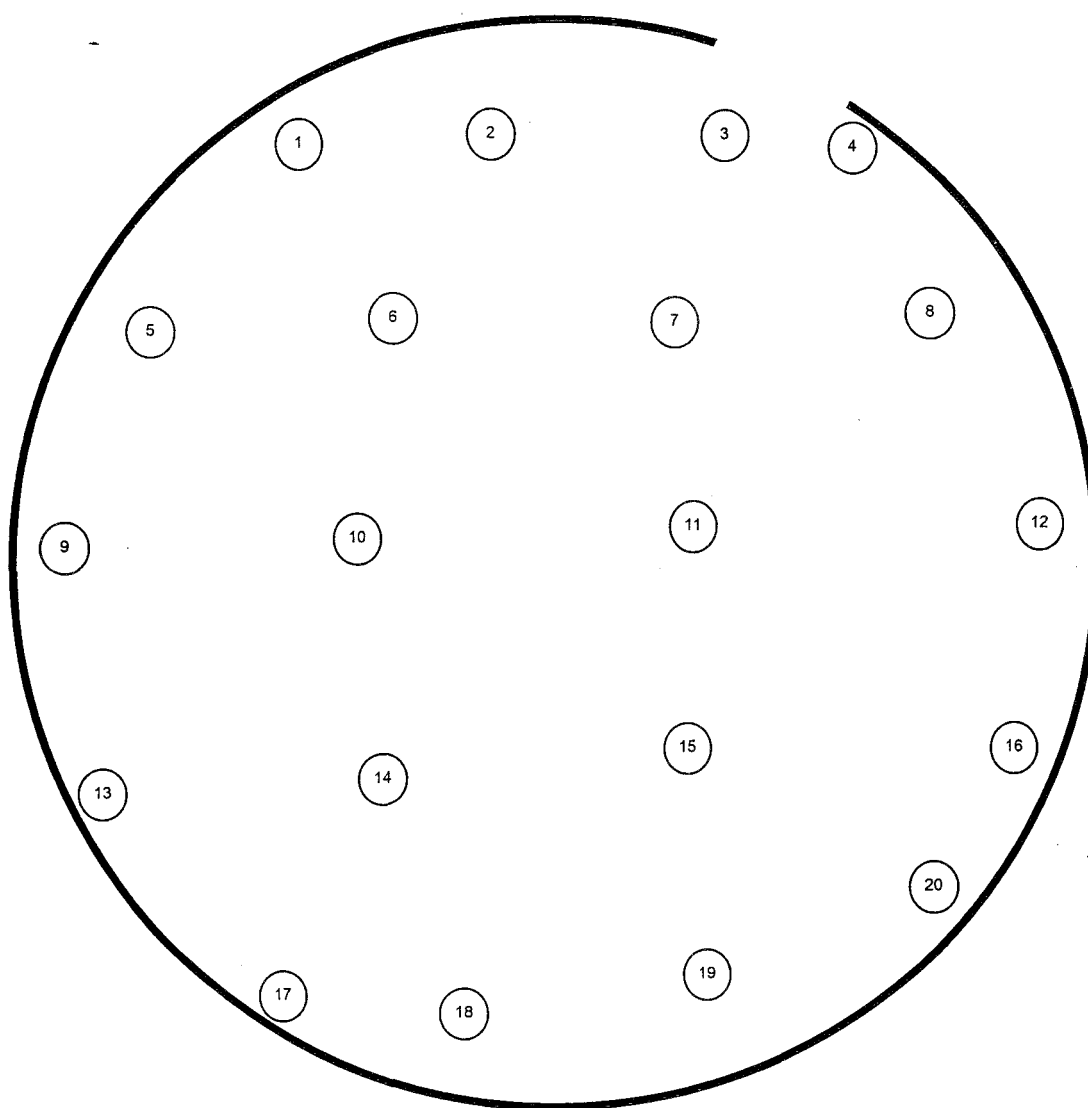
# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## Drawing Showing Survey Points

### 207 TANK



Tank is posted:  
HCA  
ARA



Tank 207

**ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE****INSTRUMENT DATA**

Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra
Model	2929	Model	2929	Model	DP-6
Serial #	147727	Serial #	NA	Serial #	3252
Cal Due	1/12/03	Cal Due	NA	Cal Due	2/6/03
Bkg.	0.5 cpm $\alpha$	Bkg.	NA cpm $\alpha$	Bkg.	6 cpm $\alpha$
Efficiency	33.5 %	Efficiency	NA %	Efficiency	21.8 %
MDA	18 dpm $\alpha$	MDA	18 dpm $\alpha$	MDA	65 dpm $\alpha$

Survey type: Contamination

Building: 207 Tank

Location: Inside Tank

Purpose: Characterization

Prior to fixative

RWP #: 02-RISS-024

Date: 12/24/02 Time: 1100

Mfg.	Ludlum	Mfg.	Ludlum	Mfg.	NE Electra
Model	2929	Model	2929	Model	DP-6
Serial #	147727	Serial #	NA	Serial #	3252
Cal Due	1/12/03	Cal Due	NA	Cal Due	2/6/03
Bkg.	58.7 cpm $\beta$	Bkg.	NA cpm $\beta$	Bkg.	431 cpm $\beta$
Efficiency	42.9 %	Efficiency	NA %	Efficiency	31.6 %
MDA	205 dpm $\alpha$	MDA	205 dpm $\alpha$	MDA	314 dpm $\beta$

PRN/REN #: NA

Comments: NA

**SURVEY RESULTS**

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe	dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe
1	Floor NW Quadrant	715	65400	NA	<205	4290	NA
2	Floor NW Quadrant	492	66000		<205	3894	
3	Floor NW Quadrant	328	53526		<205	3444	
4	Floor NW Quadrant	234	75000		<205	3126	
5	Floor NW Quadrant	415	19200		<205	4491	
6	Floor SW Quadrant	203	34038		<205	6003	
7	Floor SW Quadrant	227	63100		<205	16800	
8	Floor SW Quadrant	285	66000		<205	7980	
9	Floor SW Quadrant	199	138000		<205	3990	
10	Floor SW Quadrant	334	168000		<205	4560	
11	Floor SE Quadrant	198	84000		<205	4029	
12	Floor SE Quadrant	394	90000		<205	3240	
13	Floor SE Quadrant	184	114000		<205	4269	
14	Floor SE Quadrant	271	126000		<205	3600	
15	Floor SE Quadrant	207	78000		<205	3102	
16	Floor NE Quadrant	469	72000		<205	4329	
17	Floor NE Quadrant	350	150000		<205	4887	
18	Floor NE Quadrant	229	51000		<205	3060	
19	Floor NE Quadrant	311	66000		<205	3618	
20	Floor NE Quadrant	340	90000	NA	<205	4122	NA

Date Reviewed: 12-27-02 RS Supervision

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## SURVEY RESULTS

Swipe #	LOCATION	ALPHA		BETA			
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
21	3 foot up to interior wall	<65	4320	NA	<205	2100	NA
22	3 foot up to interior wall	<65	2466		<205	2079	
23	3 foot up to interior wall	<65	7229		<205	2760	
24	3 foot up to interior wall	<65	9366		<205	1545	
25	3 foot up to interior wall	<65	4868		<205	1551	
26	3 foot up to interior wall	<65	6120		<205	1881	
27	3 foot up to interior wall	<65	4680		<205	1614	
28	3 foot up to interior wall	<65	1260		<205	1899	
29	3 foot up to interior wall	<65	4686		<205	2037	
30	3 foot up to interior wall	78	7380		<205	2349	
31	7 foot up to interior wall	1259	132		<205	1500	
32	7 foot up to interior wall	<65	108		<205	1368	
33	7 foot up to interior wall	<65	228		<205	1854	
34	7 foot up to interior wall	<65	378		<205	2106	
35	7 foot up to interior wall	<65	2160		<205	2772	
36	7 foot up to interior wall	<65	3072		<205	2100	
37	7 foot up to interior wall	<65	2478		<205	1686	
38	7 foot up to interior wall	<65	2316		<205	1476	
39	7 foot up to interior wall	<65	1746		<205	1728	
40	7 foot up to interior wall	<65	4008		<205	2169	
41	Center	107	150000		<205	NA	
42	Center	203	90000		<205		
43	Center	192	90000		<205		
44	Center	278	60000		<205		
45	Center	114	10000		<205		
46	Center	101	15000		<205		
47	Center	95	50000		<205		
48	NA	NA	NA		NA		
49							
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55							
56							
57							
58							
59							
60							
61							
62	▼	▼	▼	▼	▼	▼	▼
63	NA	NA	NA	NA	NA	NA	NA

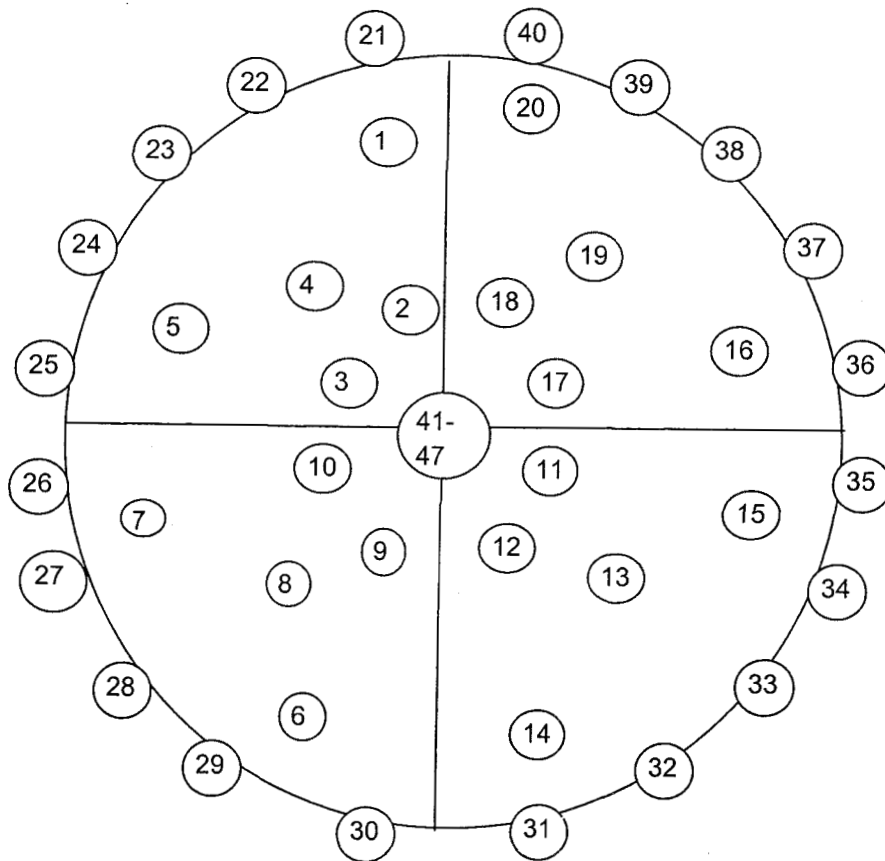
**ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Drawing Showing Survey Points

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# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Drawing Showing Survey Points



## ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg.	Ludlum	Mfg.	NA	Mfg.	NA
Model	2929	Model		Model	
Serial #	109534	Serial #		Serial #	
Cal Due	3/30/03	Cal Due		Cal Due	
Bkg.	0.3 cpm $\alpha$	Bkg.		Bkg.	
Efficiency	34.5 %	Efficiency	↓	Efficiency	↓
MDA	18 dpm $\alpha$	MDA	NA	MDA	NA

Survey type: Contamination

Building: T207

Location: T207

Purpose: Tank Survey Prior to Demolition

But after applying fixative

RWP #: 03-RISS-011

Date: 3/3/03 Time: 1400

Mfg.	Ludlum	Mfg.	NA	Mfg.	NA
Model	2929	Model		Model	
Serial #	109534	Serial #		Serial #	
Cal Due	3/30/03	Cal Due		Cal Due	
Bkg.	73.6 cpm $\beta$	Bkg.		Bkg.	
Efficiency	38.8 %	Efficiency	↓	Efficiency	↓
MDA	205 dpm $\beta$	MDA	NA	MDA	NA

RCT

RCT

PRN/REN #: NA

Comments: Tank to remain posted as CA during demolition.

## SURVEY RESULTS

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe	dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe
1	Floor	<18	NA	NA	<205	NA	NA
2	Floor	<18			<205		
3	Floor	<18			<205		
4	Floor	<18			<205		
5	Floor	<18			<205		
6	Floor	<18			<205		
7	Floor	<18			<205		
8	Floor	<18			<205		
9	Floor	<18			<205		
10	Floor	<18			<205		
11	Floor	<18			<205		
12	Floor	<18			<205		
13	Floor	<18			<205		
14	Floor	<18			<205		
15	Floor	<18			<205		
16	Floor	<18			<205		
17	Floor	<18			<205		
18	Floor	<18			<205		
19	Floor	<18			<205		
20	Floor	<18	NA	NA	<205	NA	NA

Date Reviewed: 4/24/03 RS Supervision: /



Signature

Emp. #

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## SURVEY RESULTS

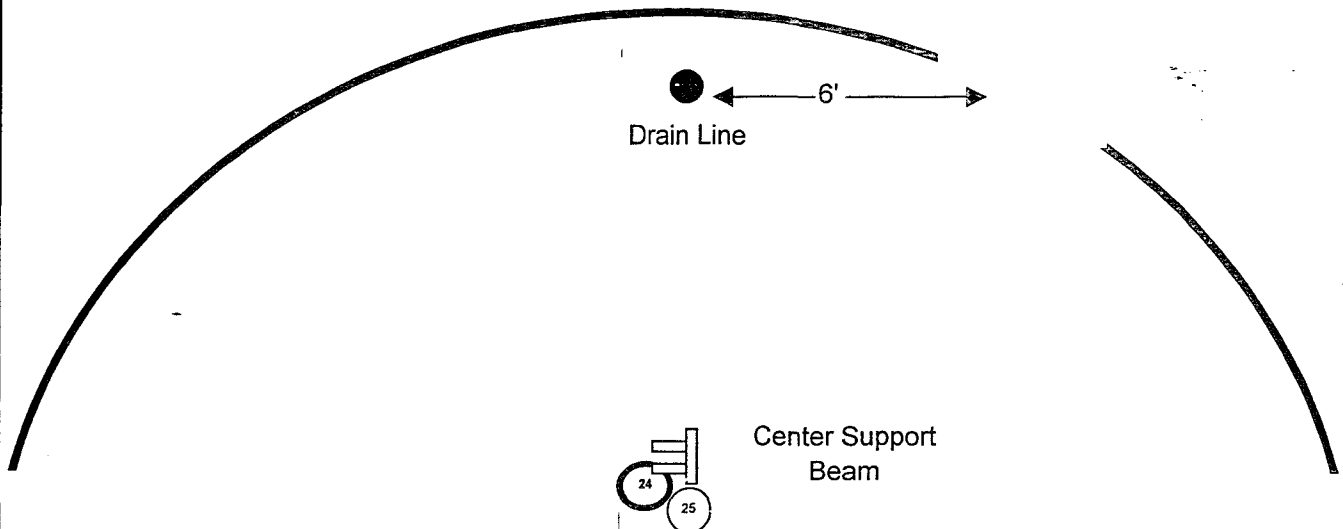
[illegible]

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# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

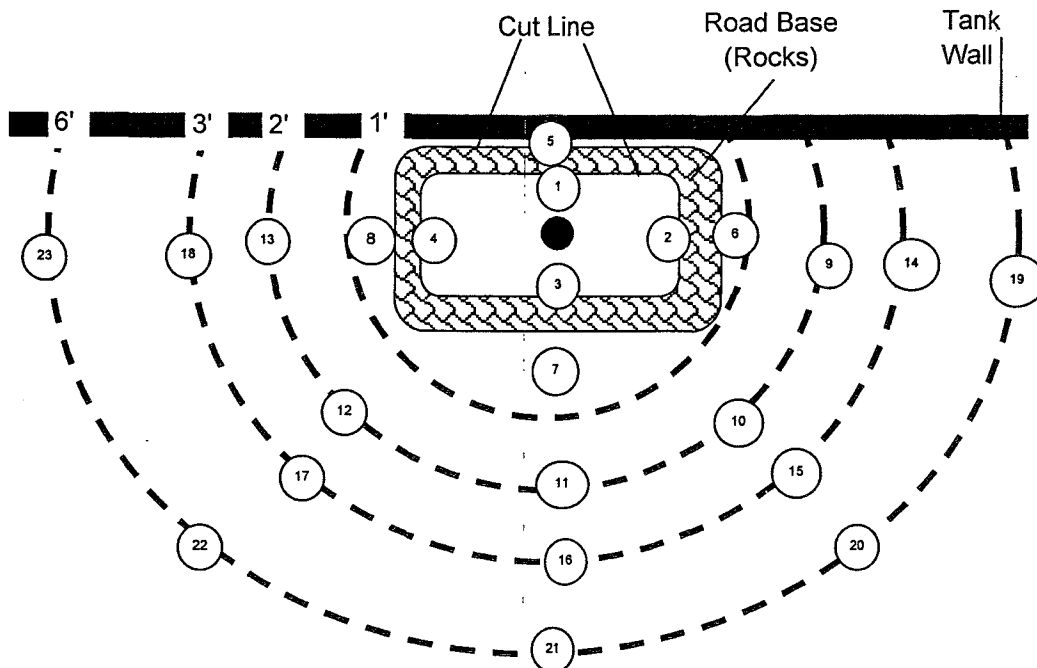
Drawing Showing Survey Points

## TANK 207



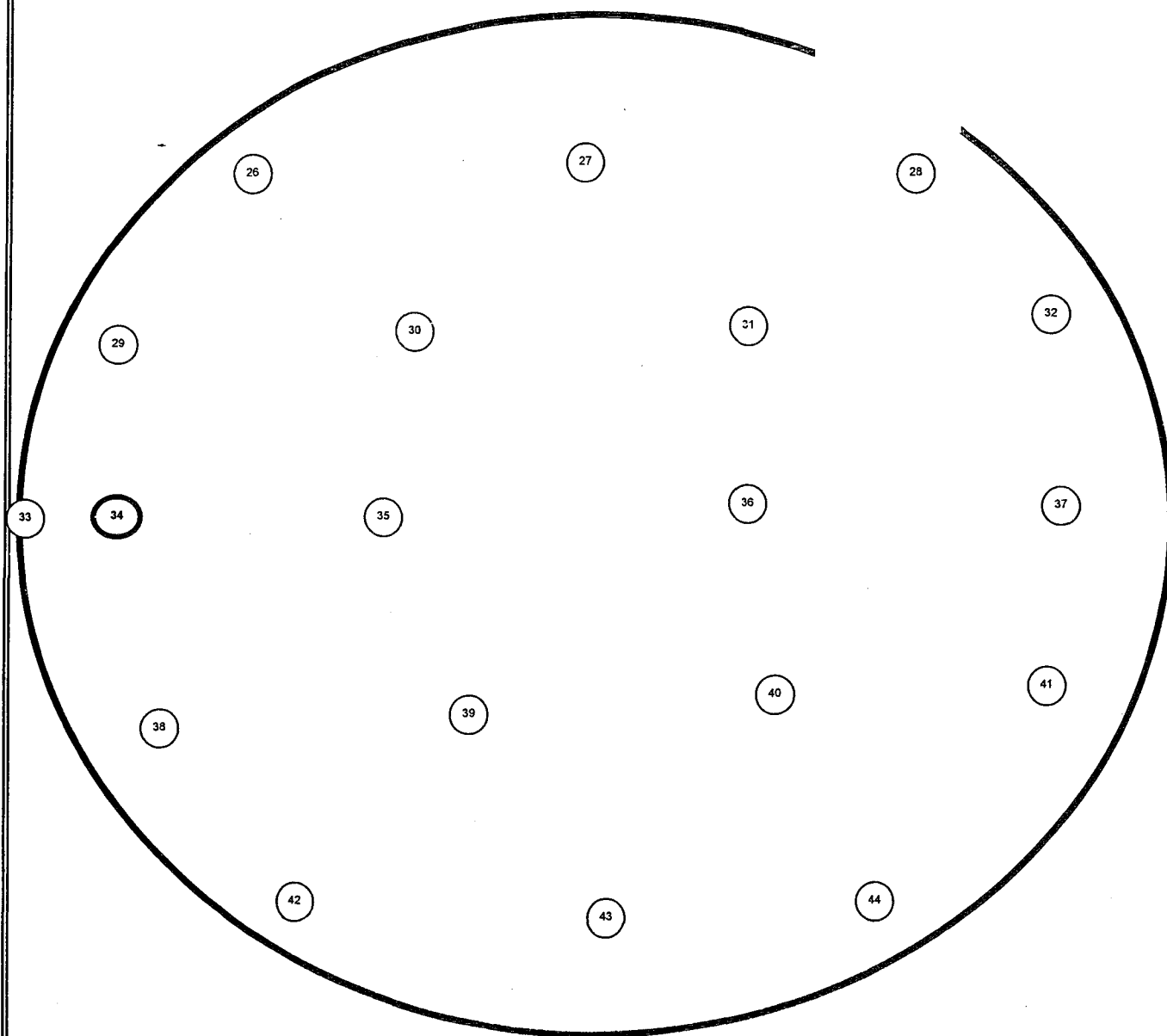
### Expanded View of Drain Line Cut Area

# Indicates areas of contamination



# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Drawing Showing Survey Points



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Industrial Hygiene Information System  
Sample Results Report

IHSR SAMPLE\_RESULTS\_REPORT

Date: 05/02/2003

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SURFACE

Sample Number Work Pkg Room Location Type Rin No Analyte Concentration

KH

HIEBERT, DOUG G

TANK 207-04282003-00-101		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-102		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-103		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-104		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-105		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-106		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-107		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-108		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-109		INSIDE	SHEAR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-110				BLANK	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04282003-00-111		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-112		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-113		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-114		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-115		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-116		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-117		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-118		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System  
Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-04282003-00-119		INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-120				BLANK	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04292003-00-121		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-122		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-123		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-124		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-125		INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-126		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-127		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-128		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-129		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-130		INSIDE	SHEAR INSIDE CAB	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-131		INSIDE	ON INTERMODAL 001036 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-132		INSIDE	ON INTERMODAL 001036 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-133		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-134		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-135		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-136		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING

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# Industrial Hygiene Information System Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05012003-00-137		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-138		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-139		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-140		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-141		INSIDE	ON INTERMODAL 001030 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-142		INSIDE	ON INTERMODAL 001030 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-143		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-144		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-145		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-146		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-147		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-148		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-149		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-150		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-151		INSIDE	ON INTERMODAL 001039 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-152		INSIDE	ON INTERMODAL 001039 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-153		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-154		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING

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# Industrial Hygiene Information System Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05012003-00-155		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-156		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-157		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-158		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-159		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-160		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-161		INSIDE	ON INTERMODAL 001037 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-162		INSIDE	ON INTERMODAL 001037 END	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-163		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-164		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-165		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-166		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-167		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-168		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-169		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-170		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-171		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-172		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING



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# Industrial Hygiene Information System Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05012003-00-173		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-174		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-175		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-176		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-177		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-178		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-179		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-180		INSIDE	PROCESSOR IN CAB	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-181		INSIDE	SHEAR HEAD INSIDE CUTTER	BLANK	03Z1569	BERYLLIUM AND B	0.0000 _
TANK 207-05012003-00-182		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-183		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-184		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-185		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-186		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-187		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-188		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-189		INSIDE	SHEAR IN CAB	WIPE	03Z1569	BERYLLIUM AND B	RESULTS PENDING
TANK 207-05012003-00-190				BLANK	03Z1569	BERYLLIUM AND B	0.0000 _

Building Subtotal: 90



# Industrial Hygiene Information System

## Sample Results Report

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Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b> <b>HIEBERT, DOUG G</b> Hygienist Subtotal: 90 Company Subtotal: 90							
<b>RFCSS</b> <b>HOLWAGER, LEEANN</b>							
TANK 207-02132003-01-001		INSIDE	FLOOR BY DRAIN	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02132003-01-002		INSIDE	BASE OF CENTER POLE	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02132003-01-003		INSIDE	PORTAL OPENING FOR AIRMOVER	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02132003-01-004		INSIDE	FLOOR - SOUTH SECTION	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02132003-01-005		INSIDE	FLOOR - EAST SECTION	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02132003-01-006		INSIDE	FLOOR - NORTH SECTION	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02132003-01-007		INSIDE	FLOOR - WEST SECTION	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02132003-01-008		TENT	FLOOR - INSIDE PEN BY EXIT POINT OF TANK	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02132003-01-009		TENT	FLOOR - INSIDE PEN BY EXIT POINT OF PEN	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02132003-01-010		INSIDE	UNDER I-BEAM AT BASE OF CENTER POLE	WIPE	03Z0950	BERYLLIUM AND B	0.1890 _ UG/100CM2
TANK 207-02132003-01-011				BLANK	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-02172003-01-001		INSIDE	UNDER I-BEAM AT BASE OF CENTER POLE	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02172003-01-002		INSIDE	UNDER I-BEAM AT BASE OF CENTER POLE	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02172003-01-003		INSIDE	ON CENTER POLE	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02172003-01-004		INSIDE	PORTAL OPENING FOR AIR MOVER	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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Sample Number	Work Pkg	Room	Location	Type	Pin No	Analyte	Concentration
RFCSS							
HOLWAGER, LEEANN							
TANK 207-02172003-01-005		INSIDE	FLOOR - EAST SECTION	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02172003-01-006		INSIDE	FLOOR - NORTH SECTION JUST INFRONT OF DOOR	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02172003-01-007		TENT	AIR INTAKE TO LOW-VOL AIR SAMPLER	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02172003-01-008		TENT	EXTERNAL SURFACES OF LOW-VOL AIR SAMPLER	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02172003-01-009		TENT	CORD FOR LOW-VOL AIR SAMPLER	WIPE	03Z0950	BERYLLIUM AND B	0.2730 _ UG/100CM2
TANK 207-02172003-01-010				BLANK	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-02182003-01-011		TENT	DEWALT SAW - CUTTING HEAD/FOOT	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02182003-01-012		TENT	DEWALT SAW - EXTERNAL SURFACES	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02182003-01-013		TENT	FLOOR WHERE LADDER WAS CUT	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02182003-01-014		TENT	WEST TABLE	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02182003-01-015		TENT	ON FLOOR BY EXIT	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02182003-01-016		TENT	ON EAST TABLE	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02182003-01-017		TENT	ON STOOL	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02182003-01-018		TENT	HIGH-VOL AIR SAMPLER - EXHAUST AND EXTERNAL SURFAC	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02182003-01-019		TENT	HIGH-VOL AIR SAMPLER - ON FEET AND LEGS	WIPE	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02182003-01-020				BLANK	03Z0950	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-02252003-01-011		INSIDE	FLOOR - APPROX. .5 FOOT SOUTH OF CUT AREA	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-012		INSIDE	FLOOR - BY DRAIN	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Post AC-Fix Survey

Post AC-Fix Survey

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Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
RFCSS HOLWAGER, LEEANN							
TANK 207-02252003-01-013		INSIDE	FLOOR - ON CUT EDGE	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-014		INSIDE	FLOOR - APPROX. 2 FEET SOUTH WEST OF CUT AREA	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-015		INSIDE	FLOOR - APPROX. 5 FOOT NORTH OF CUT AREA, BY WALL	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-016		INSIDE	FLOOR - APPROX. 3 FEET EAST OF CUT AREA	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-017		INSIDE	FLOOR - APPROX. 4 FEET WEST OF CUT AREA	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-018		INSIDE	FLANGED OPENING BY AIR MOVER	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-019		INSIDE	FACE OF PLATE BY AIR MOVER	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-020				BLANK	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-02252003-01-021		TENT	EXTERNAL SURFACES OF DEWALT DRILL	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-022		TENT	EXTERNAL SURFACES OF MILWAULKEE DRILL	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-023		TENT	EXTERNAL SURFACES OF LOW VOLUME AIR SAMPLER #95172	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-024		TENT	EXTERNAL SURFACES OF LOW VOLUME AIR SAMPLER #96066	WIPE	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02252003-01-025				BLANK	03Z1026	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-02272003-01-001		TENT	EXTERNAL SURFACES OF LOW VOLUME AIR SAMPLER #96081	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-002		TENT	CORD TO LOW VOLUME AIR SAMPLER #96081	WIPE	03Z1074	BERYLLIUM AND B	0.1700 _ UG/100CM2
TANK 207-02272003-01-003		TENT	EXTENTION CORD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-004		TENT	EXTENTION CORD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-005		TENT	TANK SIDE OF DOOR FLAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
RFCSS							
HOLWAGER, LEEANN							
TANK 207-02272003-01-006		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-007		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-008		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-009		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-010		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-011		TENT	FLOOR - SEE MAP	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-012		TENT	NIBBLER CUTTING HEAD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-013		TENT	EXTERNAL SURFACES OF NIBBLER	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-014		TENT	NIBBLER CORD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-015		TENT	ULTRA MAX 695 AEROSOL GENERATOR - WHEELS	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-016		TENT	ULTRA MAX 695 AEROSOL GENERATOR - EXTERNAL SURFACE	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-017		TENT	ULTRA MAX 695 AEROSOL GENERATOR - CORD	WIPE	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02272003-01-018				BLANK	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-02272003-01-019				BLANK	03Z1074	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11042002-01-101		CARGO	ON THE CUTTING AREA OF THE ELECTRIC SAWSALL	WIPE	03Z0034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-102		CARGO	ON THE HANDLE, TRIGGER & CORD OF ELECTRIC SAWSALL	WIPE	03Z0034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-103		CARGO	ON 5-C CLAMPS	WIPE	03Z0034	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-11042002-01-104		CARGO	ON THE MISC TOOLS LOCATED IN THE BAG WITH THE ELEC	WIPE	03Z0034	BERYLLIUM AND B	< 0.0500 _ UG/100CM2



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## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RFCSS</b>							
<b>HOLWAGER, LEEANN</b>							
TANK 207-11042002-01-105		CARGO	ON THE CUTTING AREA OF THE NIBBLER	WIPE	03Z00034	BERYLLIUM AND B	0.3960 _ UG/100CM2
TANK 207-11042002-01-106		CARGO	ON THE HANDLES, TRIGGER & CORD OF NIBBLER	WIPE	03Z00034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-107		CARGO	ON THE CUTTING AREA OF THE PORTABLE SAWSALL	WIPE	03Z00034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-108		CARGO	ON THE HANDLE, TRIGGER & 2 SAWSALL BATTERY PACKS	WIPE	03Z00034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-109		CARGO	ON THE PORTABLE DRILL	WIPE	03Z00034	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11042002-01-110				BLANK	03Z00034	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11072002-01-111		TENT	INSIDE PEN IN HCA FLOOR	WIPE	03Z0299	BERYLLIUM AND B	0.1210 _ UG/100CM2
TANK 207-11072002-01-112		TENT	FLOOR AT STEP OFF PAD FOR HCA	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-113		TENT	FLOOR INSIDE CA	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-114		TENT	ON EARL LOLLIS' SCBA MASK	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-115		TENT	ON RICKY MOTES' SCBA MASK	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-116		TENT	ON SCOTT MAHONEY'S SCBA MASK	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-117		TENT	ON JAMES SMITHS' SCBA MASK	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-118		TENT	ON FLOOR IN RBA	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-119		TENT	ON FLOOR IN RMA	WIPE	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11072002-01-120				BLANK	03Z0299	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11142002-01-121		TENT	ON RICKY MOTES' SCBA MASK	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-122		TENT	ON SCOTT MAHONEY'S SCBA MASK	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RFCSS</b>							
<b>HOLWAGER, LEEANN</b>							
TANK 207-11142002-01-123		TENT	ON EARL LOLLIS' SCBA MASK	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-124		TENT	ON JAY BARNES' SCBA MASK	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-125		TENT	FLOOR OF HCA PEN	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-126		TENT	FLOOR OF HCA STEP OFF PAD	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-127		TENT	FLOOR OF CA BAG STORAGE AREA	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-128		TENT	FLOOR OF RBA STEP OFF PAD	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-129		TENT	FLOOR IN RMA	WIPE	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11142002-01-130				BLANK	03Z0335	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11202002-01-101		INSIDE	GREG ROHER SCBA MASK	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-102		TENT	FLOOR IN HCA PEN	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-103		TENT	FLOOR @HCA STEP OFF PAD	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-104		TENT	FLOOR IN CA WHERE SLUDGE BAGS STAGED	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-105		TENT	FLOOR IN RBA	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-106		TENT	FLOOR IN RMA	WIPE	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11212002-01-107		TENT	ON 3 OF THE SCBA TANKS	WIPE	03Z0381	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-11212002-01-108		CARGO	ON RAD OPS COUNTING TABLE	WIPE	03Z0381	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-11212002-01-109		TRAILER	IN THE LUDLUM DUAL SCALER TRAYS AND ON TABLE	WIPE	03Z0381	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-11212002-01-110		TRAILER	IN THE SAC-4 TRAYS	WIPE	03Z0381	BERYLLIUM AND B	< 0.0500 _ UG/100CM2

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Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RFCSS</b>							
<b>HOLWAGER, LEEANN</b>							
TANK 207-11212002-01-111				BLANK	03Z0381	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11262002-01-112		TENT	HCA STEP OFF PAD-FLOOR	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-113		TENT	CA-FLOOR	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-114		TENT	RBA- FLOOR	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-115		TENT	RMA- FLOOR	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-116		CARGO	ON SURVEY TABLE	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-117		TRAILER	ON ELECTRAS AND 12-1A'S	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-118		TRAILER	INSIDE TRAYS OF SAC-4'S AND ON TABLE	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-119		TRAILER	INSIDE LUDLUM DUAL SCALER TRAYS	WIPE	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-11262002-01-120		TRAILER		BLANK	03Z0434	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-11262002-01-121		TENT	HCA PEN ON FLOOR	WIPE	03Z0434	BERYLLIUM AND B	0.1760 _ UG/100CM2
TANK 207-12052002-01-101		TENT	SCBA HARNESS #1, IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-102		TENT	SCBA HARNESS #2, IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-103		TENT	SCBA HARNESS #3, IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-104		TENT	FLOOR IN CA WHERE THERE WAS A SPILL OF SLUDGE	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-105		TENT	FLOOR IN HCA PEN	WIPE	03Z0568	BERYLLIUM AND B	0.1520 _ UG/100CM2
TANK 207-12052002-01-106		TENT	FLOOR AT HCA STEP OFF PAD	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-107		TENT	FLOOR IN CA, NORTH EAST CORNER WHERE BAGS STAGED	WIPE	03Z0568	BERYLLIUM AND B	10.2000 _ UG/100CM2

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Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RFCSS</b>							
<b>HOLWAGER, LEEANN</b>							
TANK 207-12052002-01-108		TENT	FLOOR IN RBA	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-109		TENT	FLOOR IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-110		TENT	SCBA HARNESS #4, IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-111		TENT	SCBA HARNESS #5, IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-112		TENT	SCBA HARNESS #6, IN RMA	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-113		CARGO	ON SURVEY CART	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-114		CARGO	ON SURVEY TABLE	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-115		CARGO	ON PAPER BELTS	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-116		TRAILER	INSIDE 3 SAC-4 TRAYS	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-117		TRAILER	ON 3 LUDLUM 12-1AS	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-118		TRAILER	ON 3 ELECTRAS	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-119		TRAILER	INSIDE 2 LUDLUM DUAL SCALER TRAYS	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12052002-01-120		TRAILER	ON AIR SAMPLE PUMPS AND HOSES	WIPE	03Z0568	BERYLLIUM AND B	< 0.0500 _ UG/100CM2
TANK 207-12052002-01-121				BLANK	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-12052002-01-122				BLANK	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-12052002-01-123		TENT	FLOOR IN CA, NORTH EAST CORNER AFTER DECON	WIPE	03Z0568	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12112002-01-101		INSIDE	FLOOR-SEE MAP	WIPE	03Z0568	BERYLLIUM AND B	22.9000 _ UG/100CM2
TANK 207-12112002-01-102		INSIDE	FLOOR-SEE MAP	WIPE	03Z0568	BERYLLIUM AND B	8.5300 _ UG/100CM2

12/25/03  
J. Lee  
12/25/03

# Industrial Hygiene Information System Sample Results Report

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## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
RFCSS							
HOLWAGER, LEEANN							
TANK 207-12112002-01-103		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	7.1300 _ UG/100CM2
TANK 207-12112002-01-104		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	10.4000 _ UG/100CM2
TANK 207-12112002-01-105		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	1.4700 _ UG/100CM2
TANK 207-12112002-01-106		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	2.7400 _ UG/100CM2
TANK 207-12112002-01-107		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	3.2300 _ UG/100CM2
TANK 207-12112002-01-108		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	2.6000 _ UG/100CM2
TANK 207-12112002-01-109		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	25.5000 _ UG/100CM2
TANK 207-12112002-01-110		INSIDE	FLOOR-SEE MAP	WIPE	03Z0588	BERYLLIUM AND B	4.6200 _ UG/100CM2
TANK 207-12112002-01-111		INSIDE	FLOOR I BEAM INTERFACE SEAM- CENTER POLE	WIPE	03Z0588	BERYLLIUM AND B	8.9300 _ UG/100CM2
TANK 207-12112002-01-112		INSIDE	ON TOP OF I BEAM I@ BASE OF CENTER POLE	WIPE	03Z0588	BERYLLIUM AND B	1.9500 _ UG/100CM2
TANK 207-12112002-01-113		INSIDE	ON THE CENTER POLE	WIPE	03Z0588	BERYLLIUM AND B	0.3840 _ UG/100CM2
TANK 207-12112002-01-114		INSIDE	INSIDE DRAIN	WIPE	03Z0588	BERYLLIUM AND B	1.8780 _ UG/100CM2
TANK 207-12112002-01-115		INSIDE	ON WALL WEST OF DOOR, APPROX 3 FEET FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12112002-01-116		INSIDE	AROUND THE PORT OPENING FOR THE AIRMOVER	WIPE	03Z0588	BERYLLIUM AND B	0.1150 _ UG/100CM2
TANK 207-12112002-01-117		INSIDE	ON WALL SOUTH OF AIRMOVER, APPROX 3 FT FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-12112002-01-118		INSIDE	ON SOUTH WALL, APPROX 0.5 FEET FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	0.4290 _ UG/100CM2
TANK 207-12112002-01-119		INSIDE	ON EAST WALL, APPROX 3 FEET FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	0.4830 _ UG/100CM2
TANK 207-12112002-01-120		INSIDE	ON WALL EAST DOOR, APPROX 0.5 FEET FROM FLOOR	WIPE	03Z0588	BERYLLIUM AND B	0.5300 _ UG/100CM2

the entire survey

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# Industrial Hygiene Information System Sample Results Report

## SURFACE

Area was cut around  
cutting  
05/02/03  
05/02/03

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RFCSS</b>							
<b>HOLWAGER, LEEANN</b>							
TANK 207-12112002-01-121				BLANK	03Z0588	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-12112002-01-122				BLANK	03Z0588	BERYLLIUM AND B	< 0.1000 _ UG
Building Subtotal: 161							
Hygienist Subtotal: 161							
Company Subtotal: 161							
<b>RTG</b>							
<b>SMITH, COLBY M</b>							
TANK 207-02212003-213-101		INSIDE	AT EDGES OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-102		INSIDE	IN AREA WHERE FINES FROM CUTTING ARE LOCATED	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-103		INSIDE	UNDERSIDE OF CENTER I BEAM, NE SIDE	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-104		INSIDE	UNDERSIDE OF CENTER I BEAM, BASE	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-105		INSIDE	EAST OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-106		INSIDE	SOUTH OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-107		INSIDE	AT ENTRY AREA TO TANK FROM TENT	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-108		INSIDE	WEST OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-109		INSIDE	CENTER OF WORK AREA	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-110		INSIDE	NORTH OF CUT AROUND DRAIN	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-111		TENT	SOUTH END NEAR TANK ENTRY	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-112		TENT	SOUTH END NEAR TANK ENTRY	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Test for beryllium when there was dust around



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# Industrial Hygiene Information System Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RTG</b>							
<b>SMITH, COLBY M</b>							
TANK 207-02212003-213-113		TENT	MIDDLE OF ROOM	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-114		TENT	NORTH END NEAR TANK ENTRY	WIPE	03Z0970	BERYLLIUM AND B	0.1180 _ UG/100CM2
TANK 207-02212003-213-115		TENT	IN BUFFER AREA, STEPOFF PAD/CENTER OF ROOM	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-116		TENT	IN BUFFER AREA, CENTER OF ROOM	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-117		TENT	ON ULTREX 695	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-118		TENT	ON HIGH VOL SAMPLER - CORD/BASE/HOUSING	WIPE	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02212003-213-119		TENT	ON LOW VOL SAMPLER - CORD/BASE/HOUSING	WIPE	03Z0970	BERYLLIUM AND B	0.2540 _ UG/100CM2
TANK 207-02212003-213-120				BLANK	03Z0970	BERYLLIUM AND B	< 0.1000 _ UG
Building Subtotal: 20							
Hygienist Subtotal: 20							
Company Subtotal: 20							
<b>SSOC</b>							
<b>SIMPSON, MARK W</b>							
TANK 207-01282003-23-002		TENT	FLOOR SE CORNER OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-003		TENT	FLOOR SW CORNER OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-004		TENT	FLOOR MIDDLE EAST SIDE OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-005		TENT	FLOOR MIDDLE WEST SIDE OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-006		TENT	FLOOR NE CORNER OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-007		TENT	FLOOR NW CORNER OF HCA	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2



# Industrial Hygiene Information System Sample Results Report

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## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
TANK 207-01282003-23-008		TENT	ON TOP OF TABLE NEAR EAST WALL	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-009		TENT	ON TOP OF TABLE NEAR EAST WALL	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-01282003-23-010		TENT	ON TOP OF TABLE NEAR WEST WALL	WIPE	03Z0831	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-001		INSIDE	ROOF AREA NORTH BEAM - BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-002		INSIDE	ROOF AREA NORTH BEAM- UNDERNEATH THE CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-003		INSIDE	ROOF AREA NORTH BEAM-TOP OF THE CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-004		INSIDE	ROOF AREA WEST BEAM-TOP OF THE CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-005		INSIDE	ROOF AREA WEST BEAM- UNDERNEATH THE CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-006		INSIDE	ROOF AREA WEST BEAM- BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-007		INSIDE	ROOF AREA EAST BEAM- TOP SIDE OF CC-FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-008		INSIDE	ROOF AREA EAST BEAM- UNDERNEATH THE CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-009		INSIDE	ROOF AREA EAST BEAM- BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-010		INSIDE	ROOF AREA SOUTH BEAM- TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-011		INSIDE	ROOF AREA SOUTH BEAM- UNDERNEATH OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-012		INSIDE	ROOF AREA SOUTH BEAM- BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-013		INSIDE	WALL AREA WEST, ABOVE 8 FOOT - TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-014		INSIDE	WALL AREA WEST, ABOVE 8 FT, UNDERNEATH CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Survey to assess CC fix effectiveness

# Industrial Hygiene Information System Sample Results Report

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## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
TANK 207-02032003-23-015		INSIDE	WALL AREA WEST, ABOVE 8 FT, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-016		INSIDE	WALL AREA SOUTH, ABOVE 8 FT, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-017		INSIDE	WALL AREA SOUTH, ABOVE 8 FT, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-018		INSIDE	WALL AREA SOUTH, ABOVE 8 FT, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-019		INSIDE	WALL AREA EAST, ABOVE 8 FT, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-020		INSIDE	WALL AREA EAST, ABOVE 8 FT, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-021		INSIDE	WALL AREA EAST, ABOVE 8 FT, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-022		INSIDE	WALL AREA NORTH, ABOVE 8 FT, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-023		INSIDE	WALL AREA NORTH, ABOVE 8 FT, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-024		INSIDE	WALL AREA NORTH, ABOVE 8 FT, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-025		INSIDE	FLOOR AREA WEST, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-026		INSIDE	FLOOR AREA WEST, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	0.1470 _ UG/100CM2
TANK 207-02032003-23-027		INSIDE	FLOOR AREA WEST, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	0.2070 _ UG/100CM2
TANK 207-02032003-23-028		INSIDE	FLOOR AREA SOUTH, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	0.1050 _ UG/100CM2
TANK 207-02032003-23-029		INSIDE	FLOOR AREA SOUTH, UNDER CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-030		INSIDE	FLOOR AREA SOUTH, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	0.1330 _ UG/100CM2
TANK 207-02032003-23-031		INSIDE	FLOOR AREA EAST, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-032		INSIDE	FLOOR AREA EAST, BELOW CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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Industrial Hygiene Information System  
Sample Results Report

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
TANK 207-02032003-23-033		INSIDE	FLOOR AREA EAST, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	0.1200 _ UG/100CM2
TANK 207-02032003-23-034		INSIDE	FLOOR AREA NORHT, TOP OF CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	0.1010 _ UG/100CM2
TANK 207-02032003-23-035		INSIDE	FLOOR AREA NORTH, BELOW CC FIXATIVE	WIPE	03Z0852	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-02032003-23-036		INSIDE	FLOOR AREA NORTH, BARE METAL	WIPE	03Z0852	BERYLLIUM AND B	0.1250 _ UG/100CM2

Building Subtotal: 45  
Hygienist Subtotal: 45  
Company Subtotal: 45  
Grand Total 316

Sample to  
assess  
of 02/1/03  
effectiveness



## ATTACHMENT D2

### Tank 207 In-Process Demolition Rad & Be Survey Data

Tank 207

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg.	Ludlum	Mfg.	NA	Mfg.	NE Electra
Model	2929	Model		Model	DP-6
Serial #	109534	Serial #		Serial #	1665
Cal Due	3/30/03	Cal Due		Cal Due	3/3/03
Bkg.	0.4 cpm $\alpha$	Bkg.		Bkg.	5 cpm $\alpha$
Efficiency	34.5 %	Efficiency	↓	Efficiency	21.0 %
MDA	18 dpm $\alpha$	MDA	NA	MDA	62 dpm $\alpha$
Mfg.	Ludlum	Mfg.	NA	Mfg.	NE Electra
Model	2929	Model		Model	DP-6
Serial #	109534	Serial #		Serial #	1665
Cal Due	3/30/03	Cal Due		Cal Due	3/3/03
Bkg.	74.2 cpm $\beta$	Bkg.		Bkg.	689 cpm $\beta$
Efficiency	38.8 %	Efficiency	↓	Efficiency	29.5 %
MDA	205 dpm $\beta$	MDA	NA	MDA	423 dpm $\beta$

Survey type: Contamination  
 Building: Tank 207  
 Location: Inside Tank  
 Purpose: Separate Drain Line from Tank Floor  
 Surveys during tank demo  
 RWP #: 03-RISS-011

Date: 2/21/03 Time: 1030

RCT: NA / NA / NA  
 Print name Signature Emp. #

PRN/REN #: NA

Comments: Cut 2" section of floor around drain line to allow removal of floor without disturbing drain line.  
 Survey performed on cut line prior to reapplication of CC Fix.

## SURVEY RESULTS

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Floor (At Cut Line)	84	360	NA	<205	3000	NA
2	Floor (At Cut Line)	87	360		<205	3000	
3	Floor (At Cut Line)	123	600		<205	4500	
4	Floor (At Cut Line)	183	600		<205	7500	
5	Floor (2' From Cut Line)	18	NA		<205	NA	
6	Floor (2' From Cut Line)	21			<205		
7	Floor (2' From Cut Line)	36			<205		
8	Floor (2' From Cut Line)	21			<205		
9	Floor	<18			<205		
10	Floor	<18			<205		
11	Floor	<18			<205		
12	Horizontal Ledge of Ionex Access	<18			<205		
13	Floor	<18			<205		
14	Floor	<18			<205		
15	Floor (Around Center Support Beam)	231			<205		
16	Floor	<18			<205		
17	Floor	<18			<205		
18	Floor	<18			<205		
19	Floor	<18	↓	↓	<205	↓	↓
20	Floor	<18	NA	NA	<205	NA	NA

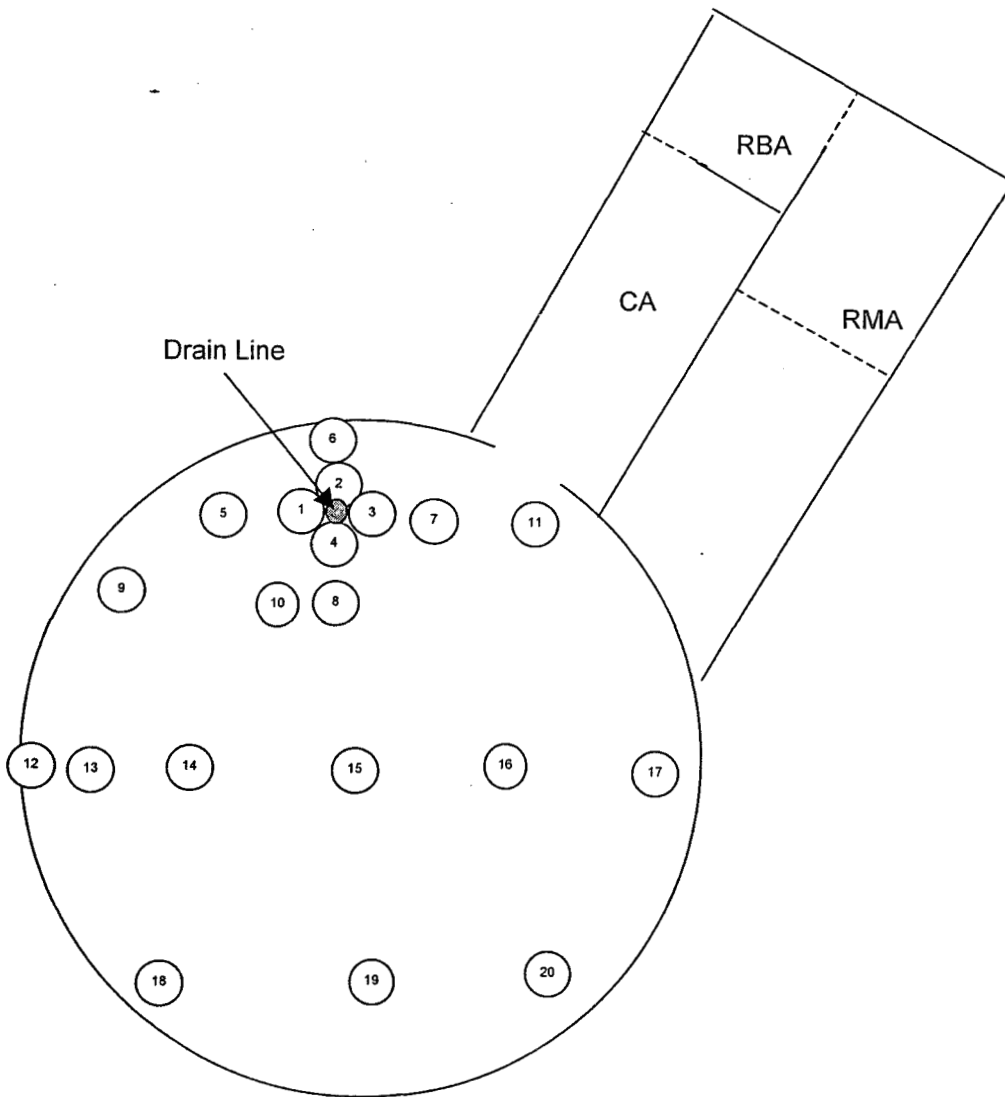
Date Reviewed: 2-24-03 RS Supervision:

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**ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

Drawing Showing Survey Points

**TANK 207**



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Industrial Hygiene Information System  
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## AIR

AIR SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Employee	Room	Task	Rin No	Analyte	Concentration	8Hr TWA	% PEL
TANK 207-04282003-00-001	PAUL M FORD	INSIDE	03Z1509	03Z1509	BERYLLIUM AND BE COMPOU	< 0.1535 _ UG/M3	<0.0198 _ UG/M3	< 0.9900%
	PAUL M FORD	INSIDE	03Z1509	03Z1509	LEAD INORGANIC (AS PB)	< 0.0031 _ MG/M3	<0.0004 _ MG/M3	< 0.8000%
	PAUL M FORD	INSIDE	03Z1509	03Z1509	CHROMIUM, METAL AND INOR	< 0.0038 _ MG/M3	<0.0005 _ MG/M3	< 0.1000%
TANK 207-04282003-00-002	DANIEL E. PRICE	INSIDE	03Z1509	03Z1509	BERYLLIUM AND BE COMPOU	< 0.1523 _ UG/M3	<0.0197 _ UG/M3	< 0.9850%
	DANIEL E. PRICE	INSIDE	03Z1509	03Z1509	LEAD INORGANIC (AS PB)	< 0.0030 _ MG/M3	<0.0004 _ MG/M3	< 0.8000%
	DANIEL E. PRICE	INSIDE	03Z1509	03Z1509	CHROMIUM, METAL AND INOR	< 0.0038 _ MG/M3	<0.0005 _ MG/M3	< 0.1000%
TANK 207-04282003-00-003	ERNEST SOTO	INSIDE	03Z1509	03Z1509	BERYLLIUM AND BE COMPOU	< 0.0660 _ UG/M3	<0.0209 _ UG/M3	< 1.0450%
	ERNEST SOTO	INSIDE	03Z1509	03Z1509	LEAD INORGANIC (AS PB)	< 0.0013 _ MG/M3	<0.0004 _ MG/M3	< 0.8000%
	ERNEST SOTO	INSIDE	03Z1509	03Z1509	CHROMIUM, METAL AND INOR	< 0.0016 _ MG/M3	<0.0005 _ MG/M3	< 0.1000%
TANK 207-04282003-00-004	EDWARD MICHAEL	INSIDE	03Z1509	03Z1509	BERYLLIUM AND BE COMPOU	< 0.0690 _ UG/M3	<0.0200 _ UG/M3	< 1.0000%
	EDWARD MICHAEL	INSIDE	03Z1509	03Z1509	LEAD INORGANIC (AS PB)	< 0.0014 _ MG/M3	<0.0004 _ MG/M3	< 0.8000%
	EDWARD MICHAEL	INSIDE	03Z1509	03Z1509	CHROMIUM, METAL AND INOR	< 0.0017 _ MG/M3	<0.0005 _ MG/M3	< 0.1000%
TANK 207-04282003-00-005	SCOTT D MAHONEY	INSIDE	03Z1509	03Z1509	BERYLLIUM AND BE COMPOU	< 0.1338 _ UG/M3	<0.0201 _ UG/M3	< 1.0050%
	SCOTT D MAHONEY	INSIDE	03Z1509	03Z1509	LEAD INORGANIC (AS PB)	< 0.0027 _ MG/M3	<0.0004 _ MG/M3	< 0.8000%
	SCOTT D MAHONEY	INSIDE	03Z1509	03Z1509	CHROMIUM, METAL AND INOR	< 0.0033 _ MG/M3	<0.0005 _ MG/M3	< 0.1000%
TANK 207-04292003-00-006	PAUL M FORD	INSIDE	03Z1509	03Z1509	BERYLLIUM AND BE COMPOU	< 0.0735 _ UG/M3	<0.0199 _ UG/M3	< 0.9950%
	PAUL M FORD	INSIDE	03Z1509	03Z1509	LEAD INORGANIC (AS PB)	< 0.0015 _ MG/M3	<0.0004 _ MG/M3	< 0.8000%
	PAUL M FORD	INSIDE	03Z1509	03Z1509	CHROMIUM, METAL AND INOR	< 0.0018 _ MG/M3	<0.0005 _ MG/M3	< 0.1000%
TANK 207-04292003-00-007	DANIEL E. PRICE	INSIDE	03Z1509	03Z1509	BERYLLIUM AND BE COMPOU	< 0.0722 _ UG/M3	<0.0197 _ UG/M3	< 0.9850%
	DANIEL E. PRICE	INSIDE	03Z1509	03Z1509	LEAD INORGANIC (AS PB)	< 0.0014 _ MG/M3	<0.0004 _ MG/M3	< 0.8000%
	DANIEL E. PRICE	INSIDE	03Z1509	03Z1509	CHROMIUM, METAL AND INOR	< 0.0018 _ MG/M3	<0.0005 _ MG/M3	< 0.1000%
TANK 207-04292003-00-008	ERNEST SOTO	INSIDE	03Z1509	03Z1509	BERYLLIUM AND BE COMPOU	< 0.0631 _ UG/M3	<0.0206 _ UG/M3	< 1.0300%
	ERNEST SOTO	INSIDE	03Z1509	03Z1509	LEAD INORGANIC (AS PB)	< 0.0013 _ MG/M3	<0.0004 _ MG/M3	< 0.8000%
	ERNEST SOTO	INSIDE	03Z1509	03Z1509	CHROMIUM, METAL AND INOR	< 0.0016 _ MG/M3	<0.0005 _ MG/M3	< 0.1000%

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Industrial Hygiene Information System  
Sample Results Report

## AIR

AIR SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Employee	Room	Task	Rin No	Analyte	Concentration	8Hr TWA	% PEL
KH								
TANK 207-04292003-00-009	EDWARD MICHAEL	INSIDE		03Z1509	BERYLLIUM AND BE COMPOU	< 0.0582 _ UG/M3	< 0.0203 _ UG/M3	< 1.0150%
	EDWARD MICHAEL	INSIDE		03Z1509	LEAD INORGANIC (AS PB)	< 0.0012 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	EDWARD MICHAEL	INSIDE		03Z1509	CHROMIUM, METAL AND INOR	< 0.0015 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-04292003-00-010	SCOTT D MAHONEY	INSIDE		03Z1509	BERYLLIUM AND BE COMPOU	< 0.1311 _ UG/M3	< 0.0208 _ UG/M3	< 1.0400%
	SCOTT D MAHONEY	INSIDE		03Z1509	LEAD INORGANIC (AS PB)	< 0.0026 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	SCOTT D MAHONEY	INSIDE		03Z1509	CHROMIUM, METAL AND INOR	< 0.0033 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-04292003-00-011	GARY G HARDING	INSIDE		03Z1509	BERYLLIUM AND BE COMPOU	< 0.2682 _ UG/M3	< 0.0201 _ UG/M3	< 1.0050%
	GARY G HARDING	INSIDE		03Z1509	LEAD INORGANIC (AS PB)	< 0.0054 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	GARY G HARDING	INSIDE		03Z1509	CHROMIUM, METAL AND INOR	< 0.0067 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-04292003-00-012				03Z1509	BERYLLIUM AND BE COMPOU	< 0.0200 _ UG	< _ UG	<
				03Z1509	LEAD INORGANIC (AS PB)	< 0.4000 _ UG	< _ UG	<
				03Z1509	CHROMIUM, METAL AND INOR	< 0.5000 _ UG	< _ UG	<
TANK 207-04302003-00-001	PAUL M FORD	INSIDE		03Z1556	BERYLLIUM AND BE COMPOU	< 0.0629 _ UG/M3	< 0.0198 _ UG/M3	< 0.9900%
	PAUL M FORD	INSIDE		03Z1556	LEAD INORGANIC (AS PB)	< 0.0013 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	PAUL M FORD	INSIDE		03Z1556	CHROMIUM, METAL AND INOR	< 0.0016 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-04302003-00-002	DANIEL E. PRICE	INSIDE		03Z1556	BERYLLIUM AND BE COMPOU	< 0.0612 _ UG/M3	< 0.0195 _ UG/M3	< 0.9750%
	DANIEL E. PRICE	INSIDE		03Z1556	LEAD INORGANIC (AS PB)	< 0.0012 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	DANIEL E. PRICE	INSIDE		03Z1556	CHROMIUM, METAL AND INOR	< 0.0015 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-04302003-00-003	ERNEST SOTO	INSIDE		03Z1556	BERYLLIUM AND BE COMPOU	< 0.0592 _ UG/M3	< 0.0191 _ UG/M3	< 0.9550%
	ERNEST SOTO	INSIDE		03Z1556	LEAD INORGANIC (AS PB)	< 0.0012 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	ERNEST SOTO	INSIDE		03Z1556	CHROMIUM, METAL AND INOR	< 0.0015 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-04302003-00-004	EDWARD MICHAEL	INSIDE		03Z1556	BERYLLIUM AND BE COMPOU	< 0.0540 _ UG/M3	< 0.0200 _ UG/M3	< 1.0000%
	EDWARD MICHAEL	INSIDE		03Z1556	LEAD INORGANIC (AS PB)	< 0.0011 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	EDWARD MICHAEL	INSIDE		03Z1556	CHROMIUM, METAL AND INOR	< 0.0013 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%

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Industrial Hygiene Information System  
Sample Results Report

## AIR

AIR SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Employee	Room	Task	Rin No	Analyte	Concentration	8Hr TWA	% PEL
KH								
TANK 207-04302003-00-005	SCOTT D MAHONEY	INSIDE	03Z1556		BERYLLIUM AND BE COMPOU	< 0.1816 _ UG/M3	< 0.0197 _ UG/M3	< 0.9850%
	SCOTT D MAHONEY	INSIDE	03Z1556		LEAD INORGANIC (AS PB)	< 0.0036 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	SCOTT D MAHONEY	INSIDE	03Z1556		CHROMIUM, METAL AND INOR	< 0.0045 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-04302003-00-006		INSIDE	03Z1556		BERYLLIUM AND BE COMPOU	< 0.0200 _ UG	< _ UG	<
		INSIDE	03Z1556		LEAD INORGANIC (AS PB)	< 0.4000 _ UG	< _ UG	<
		INSIDE	03Z1556		CHROMIUM, METAL AND INOR	< 0.5000 _ UG	< _ UG	<
TANK 207-05012003-00-007	PAUL M FORD	INSIDE	03Z1556		BERYLLIUM AND BE COMPOU	< 0.0343 _ UG/M3	< 0.0188 _ UG/M3	< 0.9400%
	PAUL M FORD	INSIDE	03Z1556		LEAD INORGANIC (AS PB)	< 0.0007 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	PAUL M FORD	INSIDE	03Z1556		CHROMIUM, METAL AND INOR	< 0.0009 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05012003-00-008	DANIEL E. PRICE	INSIDE	03Z1556		BERYLLIUM AND BE COMPOU	< 0.0627 _ UG/M3	< 0.0191 _ UG/M3	< 0.9550%
	DANIEL E. PRICE	INSIDE	03Z1556		LEAD INORGANIC (AS PB)	< 0.0013 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	DANIEL E. PRICE	INSIDE	03Z1556		CHROMIUM, METAL AND INOR	< 0.0016 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05012003-00-009	ERNEST SOTO	INSIDE	03Z1556		BERYLLIUM AND BE COMPOU	< 0.0287 _ UG/M3	< 0.0182 _ UG/M3	< 0.9100%
	ERNEST SOTO	INSIDE	03Z1556		LEAD INORGANIC (AS PB)	< 0.0006 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	ERNEST SOTO	INSIDE	03Z1556		CHROMIUM, METAL AND INOR	< 0.0007 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05012003-00-010	EDWARD MICHAEL	INSIDE	03Z1556		BERYLLIUM AND BE COMPOU	< 0.0265 _ UG/M3	< 0.0195 _ UG/M3	< 0.9750%
	EDWARD MICHAEL	INSIDE	03Z1556		LEAD INORGANIC (AS PB)	< 0.0005 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	EDWARD MICHAEL	INSIDE	03Z1556		CHROMIUM, METAL AND INOR	< 0.0007 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05012003-00-011	SCOTT D MAHONEY	INSIDE	03Z1556		BERYLLIUM AND BE COMPOU	< 0.0731 _ UG/M3	< 0.0195 _ UG/M3	< 0.9750%
	SCOTT D MAHONEY	INSIDE	03Z1556		LEAD INORGANIC (AS PB)	< 0.0015 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	SCOTT D MAHONEY	INSIDE	03Z1556		CHROMIUM, METAL AND INOR	< 0.0018 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05062003-00-001	PAUL M FORD	INSIDE	03Z1589		BERYLLIUM AND BE COMPOU	< 0.0506 _ UG/M3	< 0.0192 _ UG/M3	< 0.9600%
	PAUL M FORD	INSIDE	03Z1589		LEAD INORGANIC (AS PB)	< 0.0010 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	PAUL M FORD	INSIDE	03Z1589		CHROMIUM, METAL AND INOR	< 0.0013 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%

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## AIR

AIR SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Employee	Room	Task	Rin No	Analyte	Concentration	8Hr TWA	% PEL
TANK 207-05062003-00-002	DANIEL E. PRICE	INSIDE	03Z1589	03Z1589	BERYLLIUM AND BE COMPOU	< 0.0549 _ UG/M3	< 0.0197 _ UG/M3	< 0.9850%
	DANIEL E. PRICE	INSIDE	03Z1589	03Z1589	LEAD INORGANIC (AS PB)	< 0.0011 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	DANIEL E. PRICE	INSIDE	03Z1589	03Z1589	CHROMIUM, METAL AND INOR	0.0016 _ MG/M3	0.0006 _ MG/M3	0.1200%
TANK 207-05062003-00-003	ERNEST SOTO	INSIDE	03Z1589	03Z1589	BERYLLIUM AND BE COMPOU	< 0.0797 _ UG/M3	< 0.0186 _ UG/M3	< 0.9300%
	ERNEST SOTO	INSIDE	03Z1589	03Z1589	LEAD INORGANIC (AS PB)	< 0.0016 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	ERNEST SOTO	INSIDE	03Z1589	03Z1589	CHROMIUM, METAL AND INOR	0.0022 _ MG/M3	0.0005 _ MG/M3	0.1000%
TANK 207-05062003-00-004	EDWARD MICHAEL	INSIDE	03Z1589	03Z1589	BERYLLIUM AND BE COMPOU	< 0.0803 _ UG/M3	< 0.0201 _ UG/M3	< 1.0050%
	EDWARD MICHAEL	INSIDE	03Z1589	03Z1589	LEAD INORGANIC (AS PB)	< 0.0016 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	EDWARD MICHAEL	INSIDE	03Z1589	03Z1589	CHROMIUM, METAL AND INOR	0.0020 _ MG/M3	0.0005 _ MG/M3	0.1000%
TANK 207-05062003-00-005	SCOTT D MAHONEY	INSIDE	03Z1589	03Z1589	BERYLLIUM AND BE COMPOU	< 0.2345 _ UG/M3	< 0.0191 _ UG/M3	< 0.9550%
	SCOTT D MAHONEY	INSIDE	03Z1589	03Z1589	LEAD INORGANIC (AS PB)	< 0.0047 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	SCOTT D MAHONEY	INSIDE	03Z1589	03Z1589	CHROMIUM, METAL AND INOR	< 0.0059 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05072003-00-006	PAUL M FORD	INSIDE	03Z1589	03Z1589	BERYLLIUM AND BE COMPOU	< 0.0580 _ UG/M3	< 0.0187 _ UG/M3	< 0.9350%
	PAUL M FORD	INSIDE	03Z1589	03Z1589	LEAD INORGANIC (AS PB)	< 0.0012 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	PAUL M FORD	INSIDE	03Z1589	03Z1589	CHROMIUM, METAL AND INOR	< 0.0015 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05072003-00-007	DANIEL E. PRICE	INSIDE	03Z1589	03Z1589	BERYLLIUM AND BE COMPOU	< 0.0618 _ UG/M3	< 0.0197 _ UG/M3	< 0.9850%
	DANIEL E. PRICE	INSIDE	03Z1589	03Z1589	LEAD INORGANIC (AS PB)	< 0.0012 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	DANIEL E. PRICE	INSIDE	03Z1589	03Z1589	CHROMIUM, METAL AND INOR	< 0.0015 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05072003-00-008	ERNEST SOTO	INSIDE	03Z1589	03Z1589	BERYLLIUM AND BE COMPOU	< 0.0606 _ UG/M3	< 0.0183 _ UG/M3	< 0.9150%
	ERNEST SOTO	INSIDE	03Z1589	03Z1589	LEAD INORGANIC (AS PB)	< 0.0012 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	ERNEST SOTO	INSIDE	03Z1589	03Z1589	CHROMIUM, METAL AND INOR	< 0.0015 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05072003-00-009	EDWARD MICHAEL	INSIDE	03Z1589	03Z1589	BERYLLIUM AND BE COMPOU	< 0.0631 _ UG/M3	< 0.0200 _ UG/M3	< 1.0000%
	EDWARD MICHAEL	INSIDE	03Z1589	03Z1589	LEAD INORGANIC (AS PB)	< 0.0013 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
	EDWARD MICHAEL	INSIDE	03Z1589	03Z1589	CHROMIUM, METAL AND INOR	< 0.0016 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%

KH

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# Industrial Hygiene Information System Sample Results Report

## AIR

AIR SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Employee	Room	Task	Rin No	Analyte	Concentration	8Hr TWA	% PEL
TANK 207-05072003-00-010				03Z1589	BERYLLIUM AND BE COMPOU	< 0.0200 _ UG	< _ UG	<
				03Z1589	LEAD INORGANIC (AS PB)	< 0.4000 _ UG	< _ UG	<
				03Z1589	CHROMIUM, METAL AND INOR	0.5740 _ UG	_ UG	
TANK 207-05082003-00-011	PAUL M FORD	INSIDE		03Z1621	BERYLLIUM AND BE COMPOU	< 0.2626 _ UG/M3	< 0.0191 _ UG/M3	< 0.9550%
				03Z1621	LEAD INORGANIC (AS PB)	< 0.0053 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
				03Z1621	CHROMIUM, METAL AND INOR	< 0.0086 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05082003-00-012	DANIEL E. PRICE	INSIDE		03Z1621	BERYLLIUM AND BE COMPOU	< 0.3111 _ UG/M3	< 0.0194 _ UG/M3	< 0.9700%
				03Z1621	LEAD INORGANIC (AS PB)	< 0.0062 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
				03Z1621	CHROMIUM, METAL AND INOR	< 0.0078 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05082003-00-013	ERNEST SOTO	INSIDE		03Z1621	BERYLLIUM AND BE COMPOU	< 0.2901 _ UG/M3	< 0.0181 _ UG/M3	< 0.9050%
				03Z1621	LEAD INORGANIC (AS PB)	< 0.0058 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
				03Z1621	CHROMIUM, METAL AND INOR	< 0.0073 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05082003-00-014	EDWARD MICHAEL	INSIDE		03Z1621	BERYLLIUM AND BE COMPOU	< 0.0324 _ UG/M3	< 0.0200 _ UG/M3	< 1.0000%
				03Z1621	LEAD INORGANIC (AS PB)	< 0.0006 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
				03Z1621	CHROMIUM, METAL AND INOR	< 0.0008 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
TANK 207-05082003-00-015				03Z1621	BERYLLIUM AND BE COMPOU	< 0.0200 _ UG	< _ UG	<
				03Z1621	LEAD INORGANIC (AS PB)	< 0.4000 _ UG	< _ UG	<
				03Z1621	CHROMIUM, METAL AND INOR	< 0.5000 _ UG	< _ UG	<
TANK 207-05122003-322-001	ERNEST SOTO	INSIDE		03Z1660	BERYLLIUM AND BE COMPOU	< 0.0331 _ UG/M3	< 0.0204 _ UG/M3	< 1.0200%
				03Z1660	CHROMIUM, METAL AND INOR	< 0.0008 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
				03Z1660	LEAD INORGANIC (AS PB)	< 0.0007 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
TANK 207-05122003-322-002	EDWARD MICHAEL	INSIDE		03Z1660	BERYLLIUM AND BE COMPOU	< 0.0323 _ UG/M3	< 0.0197 _ UG/M3	< 0.9850%
				03Z1660	CHROMIUM, METAL AND INOR	0.0009 _ MG/M3	0.0005 _ MG/M3	0.1000%
				03Z1660	LEAD INORGANIC (AS PB)	< 0.0006 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%

KH

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# Industrial Hygiene Information System Sample Results Report

## AIR

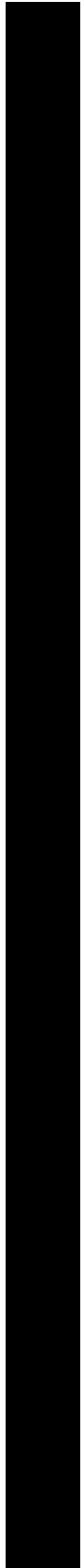
AIR SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Employee	Room	Task	Rin No	Analyte	Concentration	8Hr TWA	% PEL
TANK 207-05122003-322-003				03Z1660	BERYLLIUM AND BE COMPOU	< 0.0200 _ UG	< _ UG	<
				03Z1660	CHROMIUM, METAL AND INOR	< 0.5000 _ UG	< _ UG	<
				03Z1660	LEAD INORGANIC (AS PB)	< 0.4000 _ UG	< _ UG	<
TANK 207-05132003-322-101	EDWARD MICHAEL	INSIDE		03Z1668	BERYLLIUM AND BE COMPOU	< 0.0430 _ UG/M3	< 0.0173 _ UG/M3	< 0.8650%
	EDWARD MICHAEL	INSIDE		03Z1668	CHROMIUM, METAL AND INOR	< 0.0011 _ MG/M3	< 0.0004 _ MG/M3	< 0.0800%
	EDWARD MICHAEL	INSIDE		03Z1668	LEAD INORGANIC (AS PB)	< 0.0009 _ MG/M3	< 0.0003 _ MG/M3	< 0.6000%
TANK 207-05132003-322-102	ERNEST SOTO	INSIDE		03Z1668	BERYLLIUM AND BE COMPOU	< 0.0506 _ UG/M3	< 0.0202 _ UG/M3	< 1.0100%
	ERNEST SOTO	INSIDE		03Z1668	CHROMIUM, METAL AND INOR	< 0.0013 _ MG/M3	< 0.0005 _ MG/M3	< 0.1000%
	ERNEST SOTO	INSIDE		03Z1668	LEAD INORGANIC (AS PB)	< 0.0010 _ MG/M3	< 0.0004 _ MG/M3	< 0.8000%
TANK 207-05132003-322-103	DOUGLAS T ROSCO	INSIDE		03Z1668	BERYLLIUM AND BE COMPOU	< 0.3057 _ UG/M3	< 0.0140 _ UG/M3	< 0.7000%
	DOUGLAS T ROSCO	INSIDE		03Z1668	CHROMIUM, METAL AND INOR	< 0.0076 _ MG/M3	< 0.0004 _ MG/M3	< 0.0800%
	DOUGLAS T ROSCO	INSIDE		03Z1668	LEAD INORGANIC (AS PB)	< 0.0061 _ MG/M3	< 0.0003 _ MG/M3	< 0.6000%
TANK 207-05132003-322-104				03Z1668	BERYLLIUM AND BE COMPOU	< 0.0200 _ UG	< _ UG	<
				03Z1668	CHROMIUM, METAL AND INOR	0.5120 _ UG	_ UG	<
				03Z1668	LEAD INORGANIC (AS PB)	< 0.4000 _ UG	< _ UG	<

Building Total: 45

Company Total: 45

Grand Total: 45



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Industrial Hygiene Information System  
Sample Results Report

SURFACE

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<i>KH</i>							
<b>HIEBERT, DOUG G</b>							
TANK 207-04282003-00-101		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-102		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-103		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-104		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-105		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-106		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-107		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-108		INSIDE	SHEAR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-109		INSIDE	SHEAR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-110				BLANK	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04282003-00-111		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-112		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-113		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-114		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-115		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-116		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-117		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-118		INSIDE	PROCESSOR TRACK	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2



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## SURFACE

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-04282003-00-119		INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04282003-00-120				BLANK	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04292003-00-121		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-122		INSIDE	PROCESSOR HEAD INSIDE JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-123		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-124		INSIDE	PROCESSOR HEAD SIDE OF JAWS	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-125		INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-126		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-127		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-128		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-129		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04292003-00-130		INSIDE	SHEAR INSIDE CAB	WIPE	03Z1534	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-101		INSIDE	2ND INTERMODAL TOP SIDE RIM	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-102		INSIDE	2ND INTERMODAL TOP SIDE RIM	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-103		INSIDE	FIRST INTERMODAL TOP SIDE RIM	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-104		INSIDE	1ST INTERMODAL TOP SIDE RIM	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-105		INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-106		INSIDE	PROCESSOR ON TRACK	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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# Industrial Hygiene Information System Sample Results Report

## SURFACE

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-04302003-00-107		INSIDE	PROCESSOR ON TRACK	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-108		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-109		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-110		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-111		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-112		INSIDE	SHEAR IN CAB ON FLOOR	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-113		INSIDE	SHEAR ON TRACK	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-114		INSIDE	SHEAR ON TRACK	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-115		INSIDE	SHEAR SIDE OF JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-116		INSIDE	SHEAR SIDE OF JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-117		INSIDE	SHEAR INSIDE JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-118		INSIDE	SHEAR INSIDE JAW	WIPE	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-04302003-00-119				BLANK	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-04302003-00-120				BLANK	03Z1557	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05012003-00-131		INSIDE	ON INTERMODAL 001036 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-132		INSIDE	ON INTERMODAL 001036 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-133		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-134		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rtn No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05012003-00-135		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-136		INSIDE	ON INTERMODAL 001036 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-137		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-138		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-139		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-140		INSIDE	ON INTERMODAL 001036 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-141		INSIDE	ON INTERMODAL 001030 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-142		INSIDE	ON INTERMODAL 001030 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-143		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-144		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-145		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-146		INSIDE	ON INTERMODAL 001030 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-147		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-148		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-149		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-150		INSIDE	ON INTERMODAL 001030 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-151		INSIDE	ON INTERMODAL 001039 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-152		INSIDE	ON INTERMODAL 001039 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05012003-00-153		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-154		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-155		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-156		INSIDE	ON INTERMODAL 001039 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-157		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-158		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-159		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-160		INSIDE	ON INTERMODAL 001039 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-161		INSIDE	ON INTERMODAL 001037 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-162		INSIDE	ON INTERMODAL 001037 END	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-163		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-164		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-165		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-166		INSIDE	ON INTERMODAL 001037 SIDE	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-167		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-168		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-169		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-170		INSIDE	ON INTERMODAL 001037 TOP LIP	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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### SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rtn No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05012003-00-171		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-172		INSIDE	PROCESSOR INSIDE JAW	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-173		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-174		INSIDE	PROCESSOR SIDE OF JAW	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-175		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-176		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-177		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-178		INSIDE	PROCESSOR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-179		INSIDE	PROCESSOR IN CAB	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-180				BLANK	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05012003-00-181		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1569	BERYLLIUM AND B	0.1530 _ UG/100CM2
TANK 207-05012003-00-182		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1569	BERYLLIUM AND B	0.7020 _ UG/100CM2
TANK 207-05012003-00-183		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-184		INSIDE	SHEAR HEAD SIDE OF CUTTER	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-185		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-186		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-187		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-188		INSIDE	SHEAR TRACK	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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### SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05012003-00-189		INSIDE	SHEAR IN CAB	WIPE	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05012003-00-190				BLANK	03Z1569	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-101		INSIDE	INTERMODAL BFLU000204 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-102		INSIDE	INTERMODAL BFLU000204 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-103		INSIDE	INTERMODAL BFLU000204 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-104		INSIDE	INTERMODAL BFLU000204 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-105		INSIDE	INTERMODAL BFLU000204 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-106		INSIDE	INTERMODAL BFLU000204 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-107		INSIDE	INTERMODAL BFLU000204 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-108		INSIDE	INTERMODAL BFLU000204 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-109		INSIDE	INTERMODAL BFLU000204 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-110		INSIDE	INTERMODAL BFLU000204 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-111		INSIDE	INTERMODAL GFLU0001088 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-112		INSIDE	INTERMODAL GFLU0001088 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-113		INSIDE	INTERMODAL GFLU0001088 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-114		INSIDE	INTERMODAL GFLU0001088 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-115		INSIDE	INTERMODAL GFLU0001088 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-116		INSIDE	INTERMODAL GFLU0001088 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05122003-00-117		INSIDE	INTERMODAL GFLU001068 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-118		INSIDE	INTERMODAL GFLU001068 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-119		INSIDE	INTERMODAL GFLU001068 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-120		INSIDE	INTERMODAL GFLU001068 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-121		INSIDE	INTERMODAL BFLU0000033 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-122		INSIDE	INTERMODAL BFLU0000033 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-123		INSIDE	INTERMODAL BFLU0000033 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-124		INSIDE	INTERMODAL BFLU0000033 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-125		INSIDE	INTERMODAL BFLU0000033 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-126		INSIDE	INTERMODAL BFLU0000033 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-127		INSIDE	INTERMODAL BFLU0000033 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-128		INSIDE	INTERMODAL BFLU0000033 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-129		INSIDE	INTERMODAL BFLU0000033 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-130		INSIDE	INTERMODAL BFLU0000033 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-131		INSIDE	INTERMODAL MHFU001030 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-132		INSIDE	INTERMODAL MHFU001030 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-133		INSIDE	INTERMODAL MHFU001030 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-134		INSIDE	INTERMODAL MHFU001030 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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## SURFACE

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05122003-00-135		INSIDE	INTERMODAL MHFU001030 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-136		INSIDE	INTERMODAL MHFU001030 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-137		INSIDE	INTERMODAL MHFU001030 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-138		INSIDE	INTERMODAL MHFU001030 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-139		INSIDE	INTERMODAL MHFU001030 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-140		INSIDE	INTERMODAL MHFU001030 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-141		INSIDE	INTERMODAL MHFU001037 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-142		INSIDE	INTERMODAL MHFU001037 END	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-143		INSIDE	INTERMODAL MHFU001037 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-144		INSIDE	INTERMODAL MHFU001037 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-145		INSIDE	INTERMODAL MHFU001037 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-146		INSIDE	INTERMODAL MHFU001037 SIDE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-147		INSIDE	INTERMODAL MHFU001037 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-148		INSIDE	INTERMODAL MHFU001037 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-149		INSIDE	INTERMODAL MHFU001037 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-150		INSIDE	INTERMODAL MHFU001037 TOP LIP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-151				BLANK	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-152		INSIDE	JERSEY BARRIER 1	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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## SURFACE

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05122003-00-153		INSIDE	JERSEY BARRIER 2	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-154		INSIDE	JERSEY BARRIER 3	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-155		INSIDE	JERSEY BARRIER 4	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-156		INSIDE	JERSEY BARRIER 5	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-157		INSIDE	LADDER	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-158		INSIDE	LADDER	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-159		INSIDE	LADDER	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-160		INSIDE	SHOVEL	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-161		INSIDE	SHOVEL	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-162		INSIDE	EAST VALVE PIT - TOP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-163		INSIDE	EAST VALVE PIT - TOP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-164		INSIDE	SOUTH VALVE PIT - TOP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-165		INSIDE	SOUTH VALVE PIT - PIPE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-166		INSIDE	WEST VALVE PIT - PIPE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-167		INSIDE	WEST VALVE PIT - TOP	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-168		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-169		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-170		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05122003-00-171		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-172		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-173		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-174		INSIDE	FENCE	WIPE	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-175				BLANK	03Z1588	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-176		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-177		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-178		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-179		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-180		INSIDE	SHEAR HEAD INSIDE CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-181		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-182		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-183		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-184		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-185		INSIDE	SHEAR HEAD \SIDE OF CUTTER	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-186		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-187		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-188		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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#### SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05122003-00-189		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-190		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-191		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-192		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-193		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-194		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-195		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-196		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-197		INSIDE	SHEAR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-198		INSIDE	SHEAR IN CAB ON FLOOR	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-199		INSIDE	SHEAR IN CAB ON CONTROLS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-200		INSIDE	SHEAR IN CAB ON INTAKE	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-201		INSIDE	SHEAR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-202		INSIDE	SHEAR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-203		INSIDE	SHEAR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-204		INSIDE	SHEAR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-205				BLANK	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-206		INSIDE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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# Industrial Hygiene Information System Sample Results Report

## SURFACE

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05122003-00-207		INSIDE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-208		INSIDE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-209		INSIDE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-210		INSIDE	PROCESSOR INSIDE JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-211		INSIDE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-212		INSIDE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-213		INSIDE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-214		INSIDE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-215		INSIDE	PROCESSOR SIDE OF JAWS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-216		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-217		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-218		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-219		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-220		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-221		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-222		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-223		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-224		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2



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## SURFACE

SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>KH</b>							
<b>HIEBERT, DOUG G</b>							
TANK 207-05122003-00-225		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-226		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-227		INSIDE	PROCESSOR TRACK	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-228		INSIDE	PROCESSOR IN CAB ON FLOOR	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-229		INSIDE	PROCESSOR IN CAB ON CONTROLS	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-230		INSIDE	PROCESSOR IN CAB ON INTAKE	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-231		INSIDE	PROCESSOR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-232		INSIDE	PROCESSOR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-233		INSIDE	PROCESSOR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-234		INSIDE	PROCESSOR EXTERIOR BODY	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-235				BLANK	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG
TANK 207-05122003-00-236		INSIDE	DECON PAN	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-237		INSIDE	DECON PAN	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-238		INSIDE	DECON PAN	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-239		INSIDE	DECON PAN	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-240		INSIDE	WEST CONCRETE PAD	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-241		INSIDE	WEST CONCRETE PAD	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-242		INSIDE	WEST CONCRETE PAD	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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SURFACE SAMPLING DURING TANK 207 DEMOLITION

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<i>KH</i>							
HIEBERT, DOUG G							
TANK 207-05122003-00-243		INSIDE	WEST CONCRETE PAD	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
TANK 207-05122003-00-244		INSIDE	WEST CONCRETE PAD	WIPE	03Z1625	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
Building Subtotal: 254							
Hygienist Subtotal: 254							
Company Subtotal: 254							
Grand Total 254							



## ATTACHMENT E

### 865 High Bay Brokk Demolition Test White Paper

**COPY**

## **Building 865 Closure Project**

# **Small-Scale Floor Demolition Test**

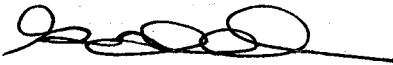
Prepared By

G. M. Aldrich, RISS Radiological Engineering

Michael Richen, CIH, RISS Industrial Safety & Hygiene

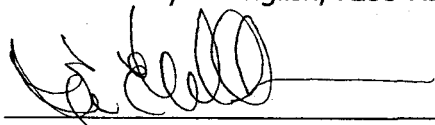
May 29, 2003

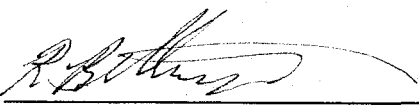
## Preparation, Review and Approval

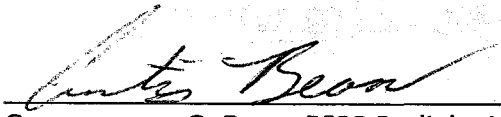
  
Prepared by G. M. Aldrich, RISS Radiological Engineering 5/29/03  
// Date

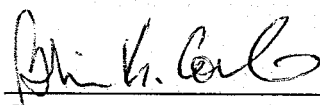
  
Prepared by M. H. Richen, CIH, RISS IS&H 5/29/03  
// Date

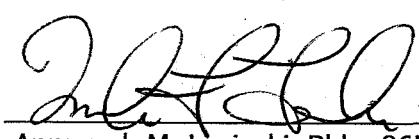
// Signature Obtained // 5/19/03  
Reviewed by R. English, RISS Radiological Engineering // Date

  
Reviewed by, B. Williamson, 865 Rad Safety Supervisor 5/29/03  
// Date

  
Concurrence, R. Bittinger, 865 Health and Safety Manager 5/29/03  
// Date

  
Concurrence, C. Bean, RISS Radiological Safety Manager 5/29/03  
// Date

  
Concurrence, B. Corb, ECC Project Manager 5/29/03  
// Date

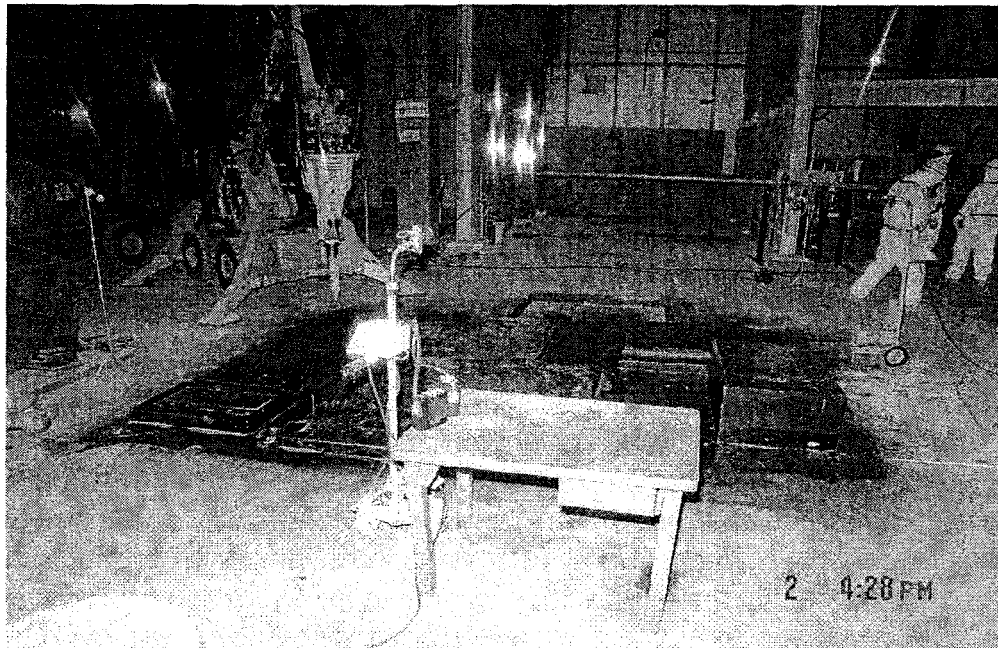
  
Approval, M. Lesinski, Bldg. 865 Project Manager 6/2/03  
// Date

## **Executive Summary**

A small-scale floor and floor-seam demolition test was conducted on the Bldg. 865 High Bay contaminated cement slab to assess potential impacts to workers & the environment during future dismantlement. Contaminated slab/pit removal is likely to occur after demo of the uncontaminated walls and ceiling. The High Bay floor has widespread fixed contamination from depleted Uranium (DU) and low levels of Beryllium (Be) contamination and must be disposed of as LLW. Although the slab will be pre-encapsulated, its dismantlement might occur in a condition open to the surrounding environment.

A Brokk Model-250 hydraulic hammer was used to dismantle a contaminated floor area of about 200 Sq. Ft., including floors, pedestals and floor seams with high levels of fixed beta contamination and low levels of Be contamination. Some floor-seam caulking removal was also done with a hammer chisel after the Brokk tests. Contamination from both DU and Be was isolated before the Brokk test by applying a fixative layer of CC-Wet and CC-Fix ~ 1/8" thick. Low-volume radiological air & Be air samplers surrounded the test area on each side.

### **Conditions Before Test**



Overall findings from all tests conducted are summarized below.

- No airborne radioactivity above 2% DAC was seen on either low-volume air samplers nor personnel lapel samplers, despite major disturbance of floor & dispersal of dust. Airborne concentrations of radiological contaminants were far below the 30% DAC 10 CFR-835, Occupational Radiation Protection regulatory threshold for respirators.
- Removable alpha and removable beta contamination did not increase from floor disturbances.
- No beryllium was detected from either area air samplers surrounding Grid #9, or from individual lapel air samplers worn by test personnel.
- Despite the significant amount of dust produced during the test removable beryllium contamination on floors was less after the test than before.

## **Background**

The Bldg. 865 upper walls and ceiling remain relatively uncontaminated from past DOE operations, and are expected to pass Pre-Demolition Surveys (PDS) and be disposed of as sanitary wastes. The 22,500 Sq. Ft. High Bay concrete slab floor has elevated fixed beta contamination from DU and low levels of removable Be contamination on it. The floor-seams or "cracks" exhibit the highest levels of fixed beta activity, that in some locations approach 700,000 dpm/100 cm<sup>2</sup>. Removable Be levels on the High Bay slab range between < 0.1 micrograms (μg)/100 cm<sup>2</sup> to about 2 μg/100 cm<sup>2</sup>.

Because of low removable DU and Be contamination levels of the High Bay slab, it has been proposed that with appropriate engineering controls, the slab could be safely demolished "in the open" with heavy industrial equipment, after wall and ceiling release & dismantlement, within occupational and environmental guidelines. It was felt that if radiological & Be contamination were properly isolated under an aggressive fixative layer, and with normal dust suppression techniques, only minimal contaminants should disperse during heavy equipment demolition operations. The degree of contamination dispersal should be negligible, and not occasion any additional subsurface soil remediation or hazards to construction workers performing demolition operations.

To test potential effects of slab demolition, a small-scale floor demolition test was done in Grid #9 of the Bldg. 865 High Bay. Grid #9 was selected as a location of relatively high average fixed DU beta contamination both of flat surfaces and within cracks. The purpose of the testing conducted was to assess potential bounding impacts upon the workers & the environment should slab demolition operations be undertaken in the open.

## **Test Preparation**

The Brokk-test was done on May 2, 2003 PM Shift, with essential personnel present. The test purpose was to simulate conservative bounding effects for future floor demolition of the slab. It was decided that heavy cement dust from the Brokk hydraulic chisel and hammer-chisel crack disturbance tests should not be suppressed by wetting & misting, in order to allow bounding airborne conditions for DU and Be contamination spread to be measured. Airflow tests done immediately prior to starting floor demo identified the predominant direction of airflow being from the Northwest to the Southeast. Fixed area samplers were placed in the downwind zone. Test personnel as much as practicable avoided the downwind zone. Air samplers for both Be and radiological contaminants were placed very close to the test area perimeter (~1 meter from the edge), as well as further out at about 3 meters. Four area Be air samplers were put into place on each side of the test area, and two low-volume air samplers deployed for radiological purposes (on the south & west sides of the test area). Test personnel were monitored with individual personnel air samplers for both Be and radiological contamination. Personnel wore full Anti-Cs, respirators, hoods, taped openings, and multiple gloves & booties. Full time RCT and IH&S coverage were present throughout the entire test duration of 1-hour.

## Radiological Results

Table 1 summarizes radiological conditions before fixative application. Fifty swipes for removable contamination were taken on floors, pedestals & cracks. All swipes were < MDA for both removable alpha & beta. Direct alpha readings at thirty floor locations averaged < 100 dpm/100 cm<sup>2</sup> total alpha. Fixed beta contamination in cracks was substantially higher than on flat surfaces of the slab, with average fixed beta activity seen on the slab running ~ 8500 dpm/100 cm<sup>2</sup>, and in the pedestal sides & cracks ~ 96,000 dpm/100 cm<sup>2</sup>. The maximum level of beta contamination seen in cracks was ~ 605,000 dpm/100 cm<sup>2</sup>. Some of the crack destructive testing was done using the Brokk hydraulic pick, and some done manually with an electric hammer chisel. However, under all test conditions, no generation of airborne nor dispersal of removable

Table 1

### Contamination Results - Before Test

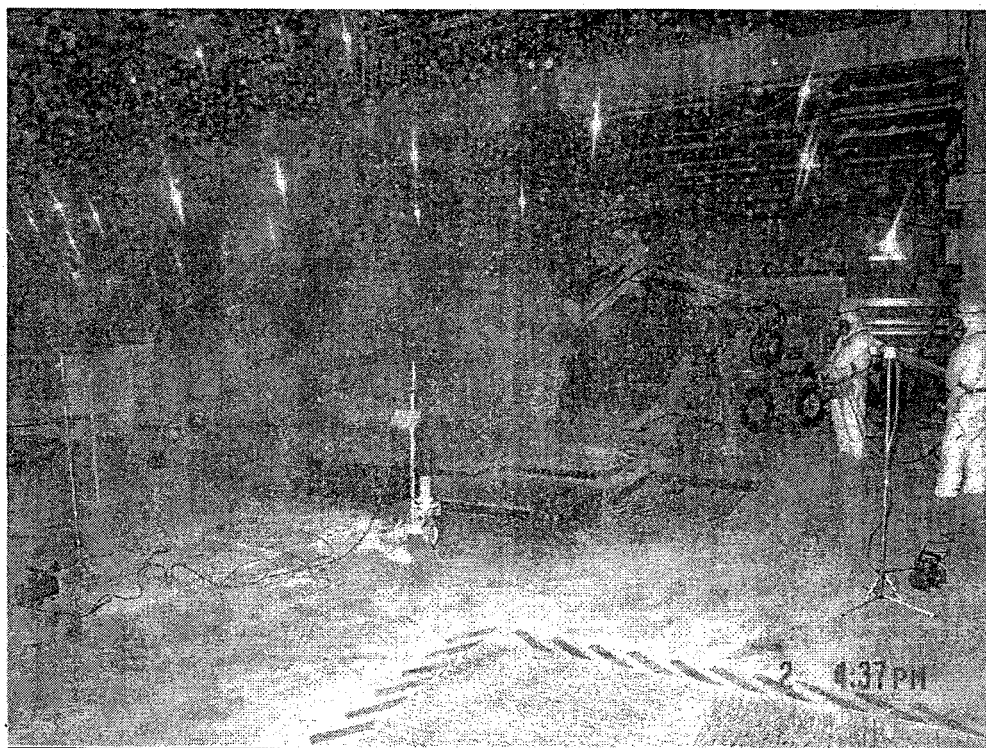
Survey Location	Fixed Beta dpm/100 cm <sup>2</sup>	Comments
NW Pad	26,250	Direct/fixed beta activity before CC-Wet & CC-Fix
NW Pad	7,000	Direct/fixed beta activity before CC-Wet & CC-Fix
NW Pad	7,000	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	7,350	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	6,300	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	7,018	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	5,250	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	15,400	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	7,700	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	5,373	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	4,200	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	3,850	Direct/fixed beta activity before CC-Wet & CC-Fix
N. Center Pad	5,250	Direct/fixed beta activity before CC-Wet & CC-Fix
Floor Indent	13,563	Direct/fixed beta activity before CC-Wet & CC-Fix
Floor Indent	7,700	Direct/fixed beta activity before CC-Wet & CC-Fix
Floor Indent	7,700	Direct/fixed beta activity before CC-Wet & CC-Fix
Floor Indent	5,250	Direct/fixed beta activity before CC-Wet & CC-Fix
SE Pad	10,500	Direct/fixed beta activity before CC-Wet & CC-Fix
South Crack	54,000	Caulk & expansion joint removed by hammer chisel
South Crack	65,000	Caulk & expansion joint removed by hammer chisel
South Crack	144,000	Caulk & expansion joint removed by hammer chisel
South Crack	604,800	Caulk & expansion joint removed by hammer chisel
South Crack	72,000	Caulk & expansion joint removed by hammer chisel
South Crack	54,000	Caulk & expansion joint removed by hammer chisel
South Crack	72,000	Caulk & expansion joint removed by hammer chisel
NE Crack	32,400	Caulk & expansion joint removed by hammer chisel
NE Crack	10,800	Caulk & expansion joint removed by hammer chisel
NE Crack	10,800	Caulk & expansion joint removed by hammer chisel
NE Crack	12,960	Caulk & expansion joint removed by hammer chisel
NE Crack	23,040	Caulk & expansion joint removed by hammer chisel
<b>Contamination Summary Data</b>		
Alpha & Beta Swipes <MDA	<b>50</b>	MDAs for removable A&B varied
Average Alpha Direct	<b>&lt; 100</b>	dpm/100 cm <sup>2</sup> fixed alpha
Floor Average Beta	<b>8,481</b>	dpm/100 cm <sup>2</sup> fixed beta
Crack Average Beta	<b>96,317</b>	dpm/100 cm <sup>2</sup> fixed beta
Floor + Crack Average Beta	<b>43,615</b>	dpm/100 cm <sup>2</sup> fixed beta
Maximum Reading	<b>604,800</b>	dpm/100 cm <sup>2</sup> fixed beta

contamination from DU was noted. There were no above-limit airborne results on any low-volume air sampler or personnel lapel air sampler deployed. This, coupled with the conservative bounding conditions of tests, indicates that with appropriate fixative, slab & pit destructive removal should also not generate any contamination or airborne radioactivity above DOE limits. This will need corroboration by the Site Clean Air Act compliance staff, to ensure that 40 CFR-Part 61, Subpart H (National Emission Standards for Emissions of Radionuclides Other Than Radon for Department of Energy Facilities) is complied with, and that emissions of radionuclides to the ambient air shall not cause any member of the public to exceed an effective dose equivalent of 10 mrem/yr.

**Table 2**  
**Airborne Radioactivity Readings – During Test**

<b>Description</b>	<b>Low Volume</b>	<b>Personal Lapel</b>	<b>DAC Reading</b>	<b>Comments</b>
Grid #9, South Side	X		< 1%	On destruction test boundary
Grid #9, West Side	X		< 1%	On destruction test boundary
Rad Engineer		X	1.7%	RE had highest net activity after decaying sample - 2.8 dpm
IH&S		X	1.2%	
RCT		X	1.3%	
Mock Person		X	< 1%	At west boundary in airflow path

**Conditions At Beginning of Test**



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## Beryllium Results

Project Industrial Hygiene collected removable beryllium wipe and air samples as part of the small-scale test. Surface sample collection consisted of removable beryllium wipe samples in the area of the test prior to and after the break up of concrete. Air sampling consisted of area air monitors surrounding the test area and lapel samplers on test personnel.

### SURFACE SAMPLE RESULTS

Removable beryllium wipe samples were collected in a four by five pattern within Grid #9. A grid in building 865 High Bay was defined as a 30' x 30' square area bounded by four columns. The test area was located in the North Central section of Grid #9, in the NE portion of the High Bay. The detection limit for removable beryllium wipes was 0.1  $\mu\text{g}/100\text{cm}^2$ .

Table 3					
<b>Removable Beryllium Wipe Results</b>					
Sample	Sample	Pre Level	Sample	Post Level	Comments
Location	ID#	$\mu\text{g}/100\text{ cm}^2$	ID #	$\mu\text{g}/100\text{ cm}^2$	
A1	44	0.36	302	<0.1	Floor
A2	34	0.57	303	<0.1	Floor
A3	33	0.14	309	<0.1	Floor
A4	24	0.19	305	<0.1	Floor
A5	23	0.13	306	<0.1	Floor
B1	43	0.31	307	<0.1	Floor
B2	35	<0.1	308	<0.1	Floor
B3	32	0.11	309	<0.1	Floor
B3	-	-	326	<0.1	Debris pile
B4	25	0.23	301	<0.1	Floor
B5	22	<0.1	311	<0.1	Floor
C1	42	<0.1	312	<0.1	Floor
C2	36	<0.1	313	<0.1	Floor
C3	31	<0.1	314	<0.1	Floor
C3	-	-	327	<0.1	Debris pile
C4	26	0.3	315	<0.1	Floor
C4	-	-	328	<0.1	Debris pile
C5	21	<0.1	316	<0.1	Floor
D1	41	0.17	317	0.34	Floor
D1	-	-	321	<0.1	Floor
D2	37	0.3	318	<0.1	Floor
D3	30	<0.1	319	<0.1	Floor
D4	27	<0.1	320	<0.1	Floor
D5	20	0.14	322	<0.1	Floor
				<0.1	Outer arm Brokk
				<0.1	Left outrigger Brokk
				<0.1	Hammer tip Brokk
				<0.1	Top of Pump 3081
Number non detects		8	-	28	< 0.1 $\mu\text{g}/100\text{ cm}^2$
Average reading		0.18		0.08	$\mu\text{g}/100\text{ cm}^2$
Maximum			0.6	$\mu\text{g}/100\text{ cm}^2$	

Twenty pre-test wipe samples were collected in Grid #9. Twelve of these samples had detectable levels of beryllium ranging from 0.13 to 0.57  $\mu\text{g}/100\text{cm}^2$ , which was typical of ambient removable Be conditions in the Bldg. 865 High Bay.

Twenty-nine post-test samples were collected. In addition to wipe samples at all pre-test locations, additional Be wipes were taken of the "Boundary Worker" sample pump, in concrete debris piles, and on the outer arm, front left outrigger and the hammer tip of the Brokk. One sample located in the Southwest corner of Grid #9 indicated 0.34  $\mu\text{g}/100\text{cm}^2$ . Since this location was not encapsulated, this reading may have simply reflected High Bay background Be conditions. All other post-test Be wipe results were non-detectable. Results after the test were less than the levels collected before, indicating that there was not significant levels of "fixed Be" within the cement matrix or cracks disturbed.

### AIR SAMPLE RESULTS

Air sampling consisted of the collection of area samples surrounding the test and lapel samples on all personnel present. Air samples were collected for the approximate one-hour duration of the test. Airflow direction as determined by smoke tubes during the test was from the Northeast to the Southwest. Four area air samples were collected surrounding the test and one area air sample was collected to approximate a stationary worker standing to the West of the Brokk hammer. This sample was downwind. All area air sample results were non detectable for beryllium.

**Table 4**  
**Area Be Air Sampler Results**

<b>Sample location</b>	<b><math>\mu\text{g} / \text{M}^3</math></b>
Area sample West side	<0.063
Area sample North side	<0.043
Area sample East side	<0.042
Area sample South side	<0.039
Boundary Worker <sup>1</sup>	<0.080

All individual lapel air samplers on test personnel were non-detectable for beryllium. There were no detectable beryllium air samples during any portions of these tests.

**Table 5**  
**Lapel Be Air Sampler Results**

<b>Sample location</b>	<b><math>\mu\text{g} / \text{M}^3</math></b>
Sample 6, RCT	<0.08
Sample 7, IH&S	<0.08
Sample 14, Brokk Operator	<0.08
Sample 17, Rad Engineer	<0.08

<sup>1</sup> A limiting case "Boundary Worker" lapel sampler was placed on the table 3' above floor level at the west edge of Grid 9 throughout the Brokk Test, directly in the airflow path. This location is considered "bounding" in that it sampled the highest amounts of airborne debris from the Brokk.

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## **Post-Test Radiological Contamination**

Table 6 summarizes contamination conditions after the Brokk test and also includes a summary of contamination from several follow-on electric hammer chisel destructive tests on crack sealant materials. Over 65 swipes for removable contamination were taken on floors pedestals & cracks in Grid #9 following the Brokk and the hammer-chisel tests. All of these swipes except two counted < MDA for *both* removable alpha & removable beta activity. Two of the post-test swipes read about 63 dpm removable alpha activity, an insignificant amount. General area direct alpha readings at thirty floor locations within Grid #9 remained unchanged, still averaging < 100 dpm/100 cm<sup>2</sup>. Fixed beta of general areas in Grid #9 decreased (due to beta self-shielding from disturbed cement) to an average of 2600 dpm/100 cm<sup>2</sup>, as compared with the pre-test average on floor of ~ 8500 dpm/100 cm<sup>2</sup>. Crack & floor-seam average fixed beta contamination levels *increased* in most cases, suggesting that "chasing" beta contamination downwards between slab segments might be labor-intensive and ineffective.

### **Conditions Near End of Test**

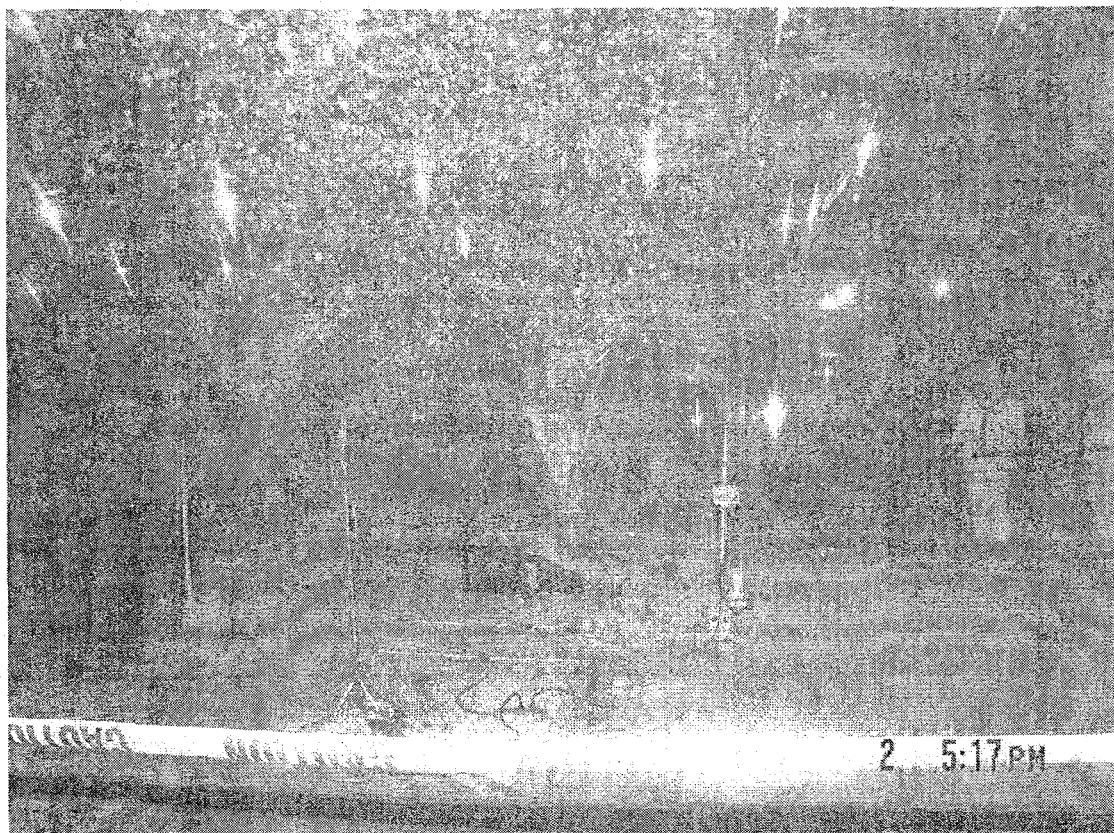


Table 6

**Contamination Results - After Test**

Survey Location	Fixed Beta dpm/100 cm <sup>2</sup>	Comments
Grid 9 Area	4,320	General Area concrete readings after Brokk test
Grid 9 Area	3,600	General Area concrete readings after Brokk test
Grid 9 Area	3,960	General Area concrete readings after Brokk test
Grid 9 Area	4,320	General Area concrete readings after Brokk test
Grid 9 Area	3,600	General Area concrete readings after Brokk test
Grid 9 Area	3,960	General Area concrete readings after Brokk test
Grid 9 Area	985	General Area concrete readings after Brokk test
Grid 9 Area	550	General Area concrete readings after Brokk test
Grid 9 Area	334	General Area concrete readings after Brokk test
Grid 9 Area	334	General Area concrete readings after Brokk test
Grid 9 Area	895	General Area concrete readings after Brokk test
Grid 9 Area	334	General Area concrete readings after Brokk test
Grid 9 Area	334	General Area concrete readings after Brokk test
Grid 9 Area	2,389	General Area concrete readings after Brokk test
Grid 9 Area	1,115	General Area concrete readings after Brokk test
Grid 9 Area	1,015	General Area concrete readings after Brokk test
Grid 9 Area	4,140	General Area concrete readings after Brokk test
Grid 9 Area	1,490	General Area concrete readings after Brokk test
Grid 9 Area	1,680	General Area concrete readings after Brokk test
Grid 9 Area	1,960	General Area concrete readings after Brokk test
Grid 9 Area	8,015	General Area concrete readings after Brokk test
Grid 9 Area	334	General Area concrete readings after Brokk test
Grid 9 Area	375	General Area concrete readings after Brokk test
Grid 9 Area	5,355	General Area concrete readings after Brokk test
Grid 9 Area	10,360	General Area concrete readings after Brokk test
South Crack	154,800	After hammer chisel removal of caulk & joint
South Crack	72,000	After hammer chisel removal of caulk & joint
South Crack	396,000	After hammer chisel removal of caulk & joint
South Crack	324,000	After hammer chisel removal of caulk & joint
South Crack	360,000	After hammer chisel removal of caulk & joint
South Crack	288,000	After hammer chisel removal of caulk & joint
South Crack	252,000	After hammer chisel removal of caulk & joint
NE Crack	32,400	After hammer chisel removal of caulk & joint
NE Crack	8,280	After hammer chisel removal of caulk & joint
NE Crack	8,280	After hammer chisel removal of caulk & joint
NE Crack	32,400	After hammer chisel removal of caulk & joint
<b>Contamination Summary Data</b>		
Alpha & Beta Swipes <MDA	<b>65</b>	2 removable alpha swipes ~ 63 dpm; all beta swipes <MDA
Average Alpha Direct	<b>&lt; 100</b>	dpm/100 cm <sup>2</sup> fixed alpha
Floor Average Beta	<b>2,630</b>	dpm/100 cm <sup>2</sup> fixed beta
Crack Average Beta	<b>175,287</b>	dpm/100 cm <sup>2</sup> fixed beta
Floor + Crack Average Beta	<b>55,387</b>	dpm/100 cm <sup>2</sup> fixed beta
Maximum Reading	<b>396,000</b>	dpm/100 cm <sup>2</sup> fixed beta

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## **Conclusions & Recommendations**

The small-scale tests performed showed that even under "worst-case" simulated demolition conditions with heavy equipment, there should not be any detectable spreads of beryllium contamination, depleted uranium contamination, nor airborne radioactivity from any contaminants tested for during this demonstration. Standard dust control techniques such as suppressant water spray would further mitigate the spread of dust from the slab.

Even at a location of relatively high averaged fixed beta radioactivity, receiving substantial disturbance of the cement & slab crevices and no mitigating dust suppression or wetting agents, there was still no airborne detected above 2% DAC by any of the radiological air samplers. The test protocol achieved much heavier cement dust dispersal & mechanical disturbance of slab contaminated surfaces than might typically occur with heavy equipment. There was no detectable increase in post-work levels of removable or total depleted Uranium alpha or beta contamination, nor of Be surface contamination.

The overall findings of the test were that dismantlement of the low-level Bldg. 865 High Bay contaminated slab in the open should not cause any above limits radiological or Beryllium impacts upon the site, or any radiological or Beryllium hazards for construction personnel performing the demolition work.

This approach will need to be validated by approved dispersion modeling performed by Clean Air Act compliance group staff.

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## ATTACHMENT F

### Recent 865 High Bay In-process Radiological Floor and Pit Survey Data

# Recent 865 High Bay Floor and Pit Rad Surveys

## 865 High Bay Floor TSAs

Grid	Location #	Beta TSA (dpm/100cm <sup>2</sup> )
1	1	2,045
1	2	2,212
1	3	2,515
1	4	1,345
1	5	2,070
1	6	3,275
1	7	4,580
1	8	6,620
1	9	7,046
1	10	10,000
1	11	18,000
2	12	32,000
2	13	25,200
2	14	18,000
2	15	22,000
2	16	72,000
2	17	68,000
2	18	72,000
3	19	2,294
3	20	1,929
3	21	3,190
3	22	3,800
3	23	2,268
3	24	2,348
4	25	6,335
4	26	38,500
4	27	10,374
4	28	15,411
4	29	5,600
4	30	42,000
4	31	11,088
4	32	9,023
4	33	10,574
5	34	3,528
5	35	2,455
5	36	7,651
5	37	7,255
5	38	2,105
5	39	1,990
5	40	2,537
5	41	2,206
5	42	1,825
5	43	14,550
6	44	18,100

## 865 High Bay Floor Summary Statistics

Grid	Min. Beta TSA (dpm/100cm <sup>2</sup> )	Max. Beta TSA (dpm/100cm <sup>2</sup> )	Avg. Beta TSA (dpm/100cm <sup>2</sup> )
1	1,345	18,000	5,428
2	18,000	72,000	44,171
3	1,929	3,800	2,638
4	5,600	42,000	16,545
5	1,825	14,550	4,610
6	2,580	20,000	9,644
7	1,890	12,325	3,612
8	24,000	192,000	55,840
9	60,000	660,000	226,500
10	1,074	23,169	4,142
11	2,750	172,900	41,845
12	2,400	52,000	12,856
13	4,200	300,000	43,489
14	5,400	480,000	81,843
15	29,200	156,000	79,600
16	984	45,200	8,606
17	2,550	22,225	5,881
18	2,700	14,161	7,155
19	105,000	490,000	242,500
20	985	16,300	3,115
21	425	3,590	870
22	600	1,640	1,139
23	2,175	205,260	30,952
24	2,265	274,560	44,866
25	4,500	60,000	13,036

\* Routine and In-Process Smear surveys were <5,000 dpm/100cm<sup>2</sup>, except one smear:  
(location 252 = 7,400 dpm/100cm<sup>2</sup>).

## Recent 865 High Bay Floor and Pit Rad Surveys

### 865 High Bay Floor TSAs

Grid	Location #	Beta TSA (dpm/100cm <sup>2</sup> )
6	45	20,000
6	46	10,700
6	47	2,580
6	48	5,100
6	49	11,200
6	50	18,100
6	51	7,420
6	52	5,650
6	53	4,260
6	54	2,970
7	55	2,670
7	56	12,325
7	57	2,935
7	58	2,060
7	59	3,225
7	60	2,760
7	61	2,235
7	62	2,405
7	63	1,890
8	64	26,000
8	65	60,000
8	66	25,600
8	67	36,000
8	68	28,000
8	69	44,000
8	70	48,000
8	71	86,000
8	72	24,000
8	73	40,000
8	74	32,000
8	75	60,000
8	76	92,000
8	77	192,000
8	78	44,000
9	79	92,000
9	80	332,000
9	81	92,000
9	82	192,000
9	83	80,000
9	84	66,000
9	85	60,000
9	86	132,000
9	87	316,000
9	88	180,000

### 865 High Bay Floor Summary Statistics

Grid	Min. Beta TSA (dpm/100cm <sup>2</sup> )	Max. Beta TSA (dpm/100cm <sup>2</sup> )	Avg. Beta TSA (dpm/100cm <sup>2</sup> )
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## Recent 865 High Bay Floor and Pit Rad Surveys

### 865 High Bay Floor TSAs

Grid	Location #	Beta TSA (dpm/100cm <sup>2</sup> )
9	89	660,000
9	90	516,000
10	91	2,043
10	92	2,268
10	93	1,920
10	94	1,176
10	95	1,554
10	96	2,175
10	97	1,074
10	98	2,076
10	99	2,586
10	100	5,520
10	101	23,169
11	102	172,900
11	103	16,300
11	104	92,000
11	105	16,200
11	106	6,800
11	107	82,300
11	108	53,200
11	109	7,420
11	110	5,750
11	111	4,680
11	112	2,750
12	113	4,200
12	114	4,600
12	115	52,000
12	116	2,400
12	117	27,000
12	118	4,500
12	119	12,900
12	120	3,900
12	121	4,200
13	122	300,000
13	123	24,000
13	124	18,000
13	125	7,500
13	126	4,800
13	127	21,000
13	128	7,400
13	129	4,500
13	130	4,200
14	131	19,800
14	132	39,000

### 865 High Bay Floor Summary Statistics

Grid	Min. Beta TSA (dpm/100cm <sup>2</sup> )	Max. Beta TSA (dpm/100cm <sup>2</sup> )	Avg. Beta TSA (dpm/100cm <sup>2</sup> )
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## Recent 865 High Bay Floor and Pit Rad Surveys

### 865 High Bay Floor TSAs

Grid	Location #	Beta TSA (dpm/100cm <sup>2</sup> )
14	133	480,000
14	134	5,400
14	135	5,800
14	136	7,800
14	137	315,000
14	138	10,500
14	139	17,500
14	140	10,500
14	141	17,500
14	142	17,500
14	143	87,500
14	144	112,000
15	145	52,800
15	146	40,000
15	147	42,800
15	148	100,000
15	149	72,000
15	150	106,000
15	151	153,200
15	152	64,000
15	153	156,000
15	154	40,000
15	155	50,400
15	156	29,200
15	157	104,000
15	158	104,000
16	159	45,200
16	160	31,700
16	161	1,710
16	162	2,000
16	163	984
16	164	1,355
16	165	2,646
16	166	5,484
16	167	1,035
16	168	1,000
16	169	1,550
17	170	2,710
17	171	22,225
17	172	3,355
17	173	2,710
17	174	2,550
17	175	4,130
17	176	2,950

### 865 High Bay Floor Summary Statistics

Grid	Min. Beta TSA (dpm/100cm <sup>2</sup> )	Max. Beta TSA (dpm/100cm <sup>2</sup> )	Avg. Beta TSA (dpm/100cm <sup>2</sup> )
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## Recent 865 High Bay Floor and Pit Rad Surveys

### 865 High Bay Floor TSAs

Grid	Location #	Beta TSA (dpm/100cm <sup>2</sup> )
17	177	6,420
18	178	4,423
18	179	2,700
18	180	8,277
18	181	4,297
18	182	14,161
18	183	9,074
19	184	490,000
19	185	245,000
19	186	105,000
19	187	157,500
19	188	273,000
19	189	112,000
19	190	315,000
20	191	985
20	192	1,455
20	193	1,525
20	194	16,300
20	195	1,665
20	196	1,815
20	197	1,075
20	198	1,831
20	199	1,385
21	200	450
21	201	500
21	202	640
21	203	570
21	204	3,590
21	205	475
21	206	425
21	207	690
21	208	490
22	209	1,040
22	210	1,465
22	211	1,040
22	212	800
22	213	600
22	214	1,415
22	215	815
22	216	1,640
22	217	1,435
23	218	5,205
23	219	2,175
23	220	4,683

### 865 High Bay Floor Summary Statistics

Grid	Min. Beta TSA (dpm/100cm <sup>2</sup> )	Max. Beta TSA (dpm/100cm <sup>2</sup> )	Avg. Beta TSA (dpm/100cm <sup>2</sup> )
------	---	---	---

179

## Recent 865 High Bay Floor and Pit Rad Surveys

### 865 High Bay Floor TSAs

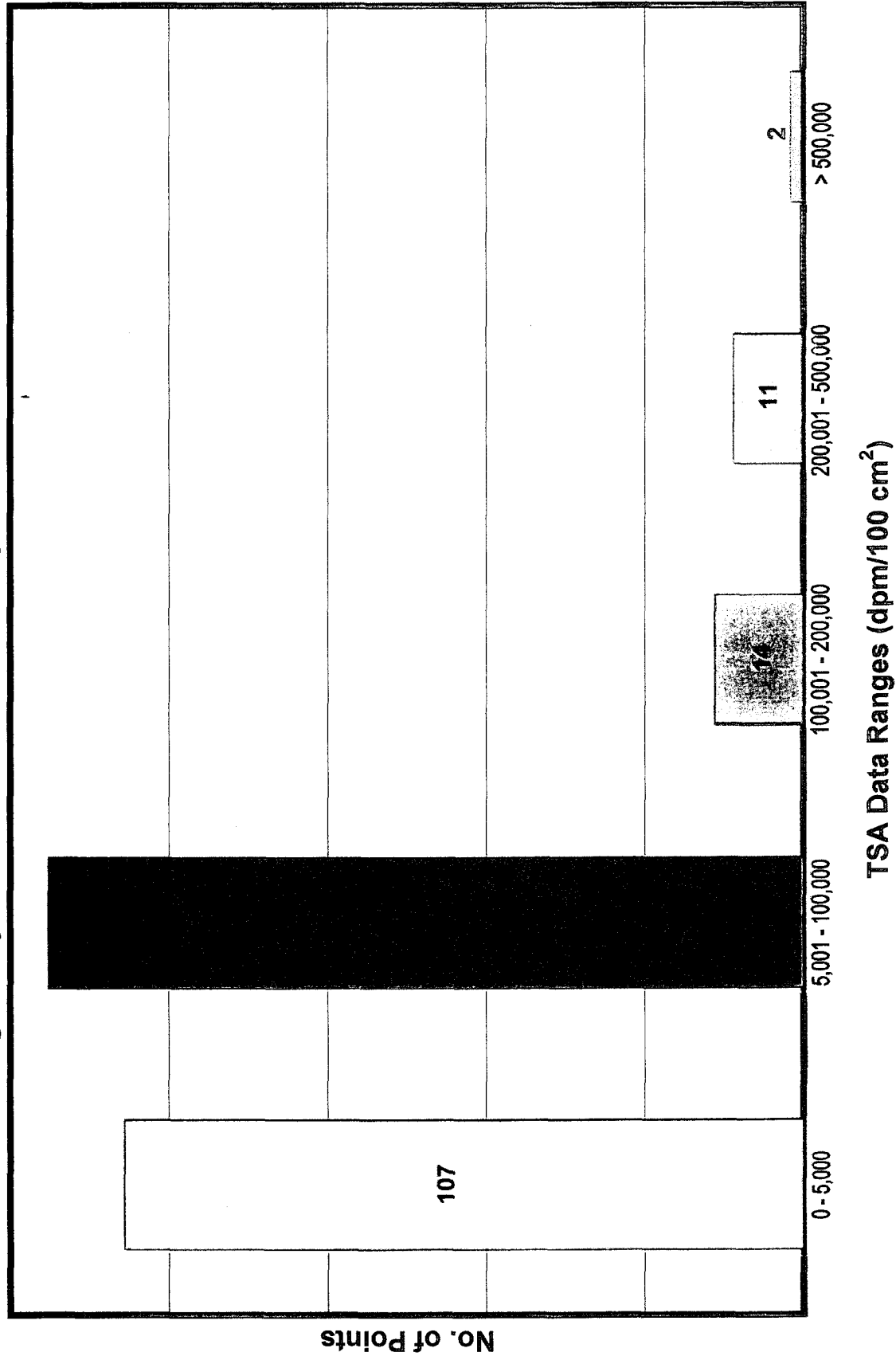
Grid	Location #	Beta TSA (dpm/100cm <sup>2</sup> )
23	221	5,634
23	222	3,714
23	223	3,081
23	224	3,996
23	225	9,012
23	226	3,156
23	227	94,560
23	228	205,260
24	229	28,860
24	230	5,457
24	231	23,892
24	232	10,596
24	233	5,874
24	234	2,265
24	235	3,468
24	236	2,688
24	237	4,209
24	238	274,560
24	239	81,960
24	240	94,560
25	241	8,650
25	242	14,150
25	243	4,620
25	244	5,470
25	245	11,820
25	246	8,650

### 865 High Bay Floor Summary Statistics

Grid	Min. Beta TSA (dpm/100cm <sup>2</sup> )	Max. Beta TSA (dpm/100cm <sup>2</sup> )	Avg. Beta TSA (dpm/100cm <sup>2</sup> )
------	---	---	---

180

# B865 High Bay Total Surface Activity (TSA) Point Spread



# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>	Survey type: <u>Contamination</u>		
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>	Building: <u>865</u>		
Serial # <u>176102</u>	Serial # <u>176082</u>	Serial # <u>3248</u>	Location: <u>High Bay</u>		
Cal Due <u>6/9/03</u>	Cal Due <u>6/11/03</u>	Cal Due <u>7/9/03</u>	Purpose: <u>Weekly Routine (865-2W-CA)</u>		
Bkg. <u>0.3 cpm α</u>	Bkg. <u>0.6 cpm α</u>	Bkg. <u>5 cpm α</u>	RWP #: <u>03-865-001</u>		
Efficiency <u>34.4 %</u>	Efficiency <u>35.5 %</u>	Efficiency <u>21.4 %</u>	Date: <u>4/22/03</u> Time: <u>8:30 AM</u>		
MDA <u>18 dpm α</u>	MDA <u>18 dpm α</u>	MDA <u>62 dpm α</u>			
Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>			
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>			
Serial # <u>176102</u>	Serial # <u>176082</u>	Serial # <u>3248</u>			
Cal Due <u>6/9/03</u>	Cal Due <u>6/11/03</u>	Cal Due <u>7/9/03</u>			
Bkg. <u>70.2 cpm β</u>	Bkg. <u>82.1 cpm β</u>	Bkg. <u>552 cpm β</u>	RCT: <u>N/A</u> / <u>N/A</u> / <u>N/A</u>		
Efficiency <u>40.8 %</u>	Efficiency <u>38.6 %</u>	Efficiency <u>30.1 %</u>	Print name                      Signature                      Emp. #		
MDA <u>205 dpm α</u>	MDA <u>205 dpm α</u>	MDA <u>372 dpm β</u>			

PRN/REN #: N/A

Comments N/A

## SURVEY RESULTS

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	FLOOR	<18	NA	NA	<205	NA	NA
2	FLOOR	<18	NA	NA	<205	NA	NA
3	FLOOR	<18	NA	NA	<205	NA	NA
4	FLOOR	<18	NA	NA	<205	NA	NA
5	FLOOR	<18	NA	NA	<205	NA	NA
6	FLOOR	<18	NA	NA	<205	NA	NA
7	FLOOR	<18	NA	NA	<205	NA	NA
8	FLOOR	<18	NA	NA	<205	NA	NA
9	FLOOR	<18	NA	NA	<205	NA	NA
10	FLOOR	<18	NA	NA	<205	NA	NA
11	FLOOR	<18	NA	NA	<205	NA	NA
12	FLOOR	<18	NA	NA	<205	NA	NA
13	FLOOR	<18	NA	NA	<205	NA	NA
14	FLOOR	<18	NA	NA	<205	NA	NA
15	FLOOR	<18	NA	NA	<205	NA	NA
16	FLOOR	<18	NA	NA	<205	NA	NA
17	FLOOR	<18	NA	NA	<205	NA	NA
18	FLOOR	<18	NA	NA	<205	NA	NA
19	FLOOR	<18	NA	NA	<205	NA	NA
20	FLOOR	<18	NA	NA	<205	NA	NA

Date Reviewed: 4/22/03 RS Supervision: [REDACTED]

Print Name

Signature

Emp. #

183

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

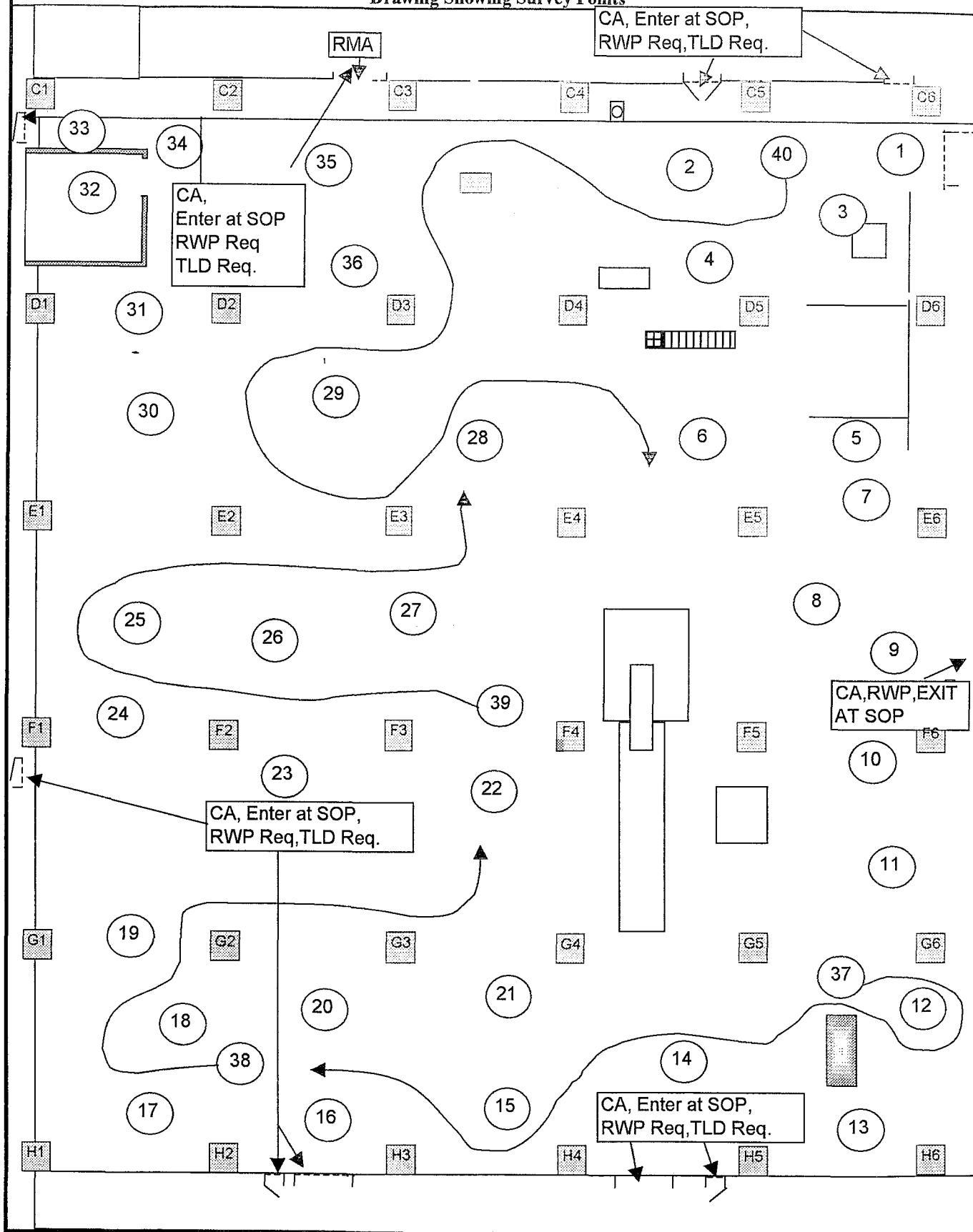
## SURVEY RESULTS

[illegible]

184

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Drawing Showing Survey Points



185

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>
Serial # <u>176102</u>	Serial # <u>176082</u>	Serial # <u>3248</u>
Cal Due <u>6/9/03</u>	Cal Due <u>6/11/03</u>	Cal Due <u>7/9/03</u>
Bkg. <u>0.3 dpm α</u>	Bkg. <u>0.6 dpm α</u>	Bkg. <u>5 dpm α</u>
Efficiency <u>34.4 %</u>	Efficiency <u>35.5 %</u>	Efficiency <u>21.4 %</u>
MDA <u>18 dpm α</u>	MDA <u>18 dpm α</u>	MDA <u>62 dpm α</u>
Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>
Serial # <u>176102</u>	Serial # <u>176082</u>	Serial # <u>3248</u>
Cal Due <u>6/9/03</u>	Cal Due <u>6/11/03</u>	Cal Due <u>7/9/03</u>
Bkg. <u>70.2 dpm β</u>	Bkg. <u>82.1 dpm β</u>	Bkg. <u>552 dpm β</u>
Efficiency <u>40.8 %</u>	Efficiency <u>38.6 %</u>	Efficiency <u>30.1 %</u>
MDA <u>205 dpm β</u>	MDA <u>205 dpm β</u>	MDA <u>372 dpm β</u>

Survey type: Contamination

Building: 865

Location: Room 171/172

Purpose: Weekly Routine (865-2W-CA)

RWP #: 03-865-001

Date: 4/22/03 Time: 0900

R

RCT: NA / NA / NA

Print name

Signature

Emp. #

PRN/REN #: NA

Comments: Isotope of concern is DU.

## SURVEY RESULTS

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	see map	<18	NA	NA	<205	NA	NA
2	see map	<18	NA	NA	<205	NA	NA
3	see map	<18	NA	NA	<205	NA	NA
4	see map	<18	NA	NA	<205	NA	NA
5	see map	<18	NA	NA	<205	NA	NA
6	see map	<18	NA	NA	<205	NA	NA
7	see map	<18	NA	NA	<205	NA	NA
8	see map	NA	NA	<62	NA	NA	<372
9	NA	NA	NA	NA	NA	NA	NA
10	NA	NA	NA	NA	NA	NA	NA
11	NA	NA	NA	NA	NA	NA	NA
12	NA	NA	NA	NA	NA	NA	NA
13	NA	NA	NA	NA	NA	NA	NA
14	NA	NA	NA	NA	NA	NA	NA
15	NA	NA	NA	NA	NA	NA	NA
16	NA	NA	NA	NA	NA	NA	NA
17	NA	NA	NA	NA	NA	NA	NA
18	NA	NA	NA	NA	NA	NA	NA
19	NA	NA	NA	NA	NA	NA	NA
20	NA	NA	NA	NA	NA	NA	NA

Date Reviewed: 4/22/03 RS Supervision: [Redacted]

Print Name

Signature

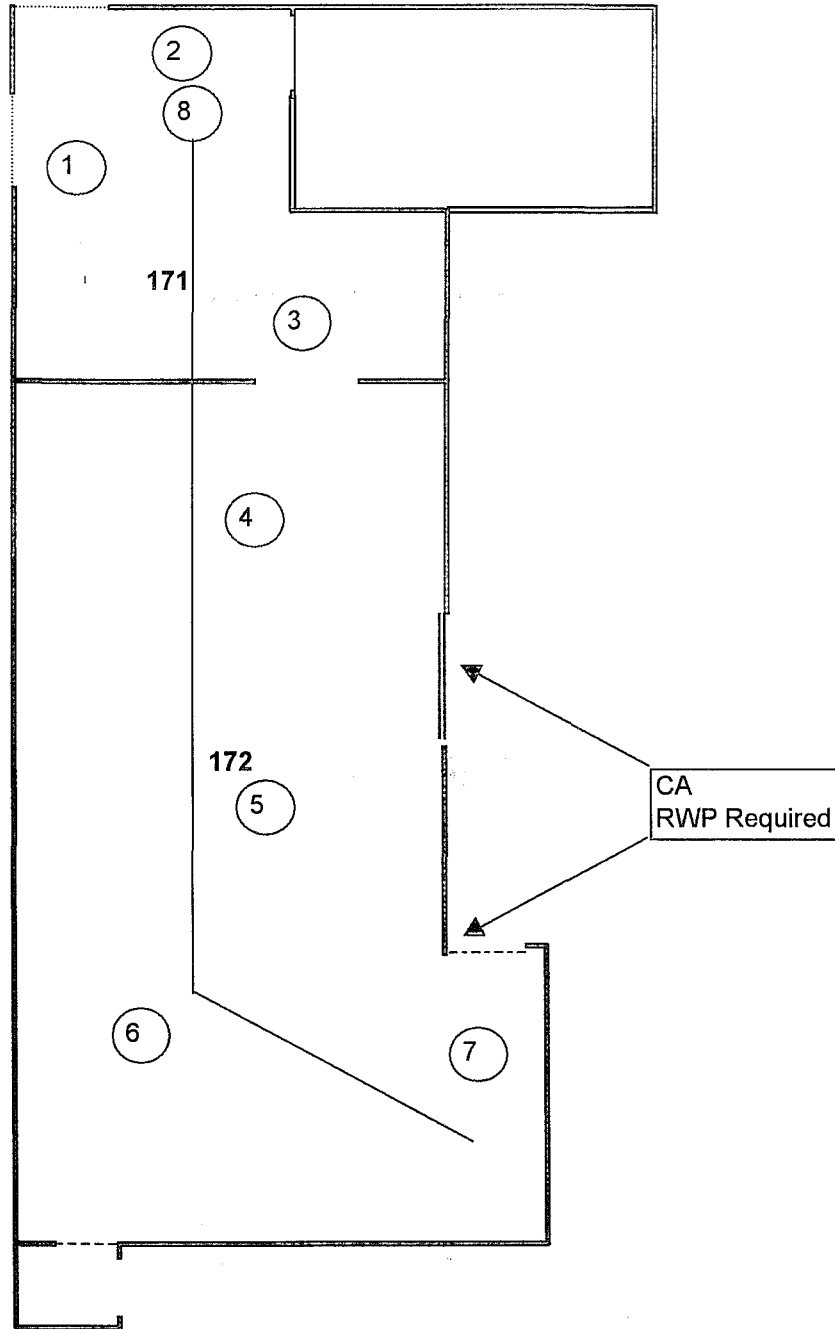
Emp. #

186

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Drawing Showing Survey Points

B865 EAST



137

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>	<b>Survey type:</b> Alpha, beta Contamination		
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>	Building: <u>865</u>		
Serial # <u>176082</u>	Serial # <u>176102</u>	Serial # <u>3247</u>	Location: <u>Room 171 and 172</u>		
Cal Due <u>6-11-03</u>	Cal Due <u>6-9-03</u>	Cal Due <u>5-13-03</u>	Purpose: <u>Weekly contamination area routine</u>		
Bkg. <u>0.2 cpm α</u>	Bkg. <u>0.1 cpm α</u>	Bkg. <u>1 cpm α</u>	RWP #: <u>03-865-001</u>		
Efficiency <u>35.5 %</u>	Efficiency <u>35.5 %</u>	Efficiency <u>21.7 %</u>	Date: <u>4-17-03</u> Time: <u>0915</u>		
MDA <u>18 dpm α</u>	MDA <u>18 dpm α</u>	MDA <u>34 dpm α</u>	RC: <span style="background-color: black; color: black;">[REDACTED]</span>		
Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>	RCT: <u>N/A</u> / <u>N/A</u> / <u>N/A</u>		
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>	Print name                      Signature                      Emp. #		
Serial # <u>176082</u>	Serial # <u>176102</u>	Serial # <u>3247</u>			
Cal Due <u>6-11-03</u>	Cal Due <u>6-9-03</u>	Cal Due <u>5-13-03</u>			
Bkg. <u>79.6 cpm β</u>	Bkg. <u>71.2 cpm β</u>	Bkg. <u>533 cpm β</u>			
Efficiency <u>38.6 %</u>	Efficiency <u>41.4 %</u>	Efficiency <u>32.2 %</u>			
MDA <u>205 dpm β</u>	MDA <u>205 dpm β</u>	MDA <u>342 dpm β</u>			

PRN/REN #: N/A

Comments Isotope of concern is depleted uranium (U-238).

## SURVEY RESULTS

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Floor	<18	N/A	N/A	<205	N/A	N/A
2	Floor	<18	N/A	N/A	<205	N/A	N/A
3	Floor	<18	N/A	N/A	<205	N/A	N/A
4	Floor	<18	N/A	<34	<205	N/A	<342
5	Floor	<18	N/A	N/A	<205	N/A	N/A
6	Floor	<18	N/A	N/A	<205	N/A	N/A
7	Floor	<18	N/A	N/A	<205	N/A	N/A
8	Floor	<18	N/A	N/A	<205	N/A	N/A
9	Floor	<18	N/A	N/A	<205	N/A	N/A
10	Floor	<18	N/A	N/A	<205	N/A	N/A
11	Floor	<18	N/A	N/A	<205	N/A	N/A
12	Floor	<18	N/A	<34	<205	N/A	<342
13	Floor	<18	N/A	N/A	<205	N/A	N/A
14	Floor	<18	N/A	N/A	<205	N/A	N/A
15	Floor	<18	N/A	N/A	<205	N/A	N/A
16	Floor	<18	N/A	<34	<205	N/A	<342
17	Floor	<18	N/A	N/A	<205	N/A	N/A
18	Floor	<18	N/A	N/A	<205	N/A	N/A
19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Date Reviewed: 4/17/03

RS Supervisor

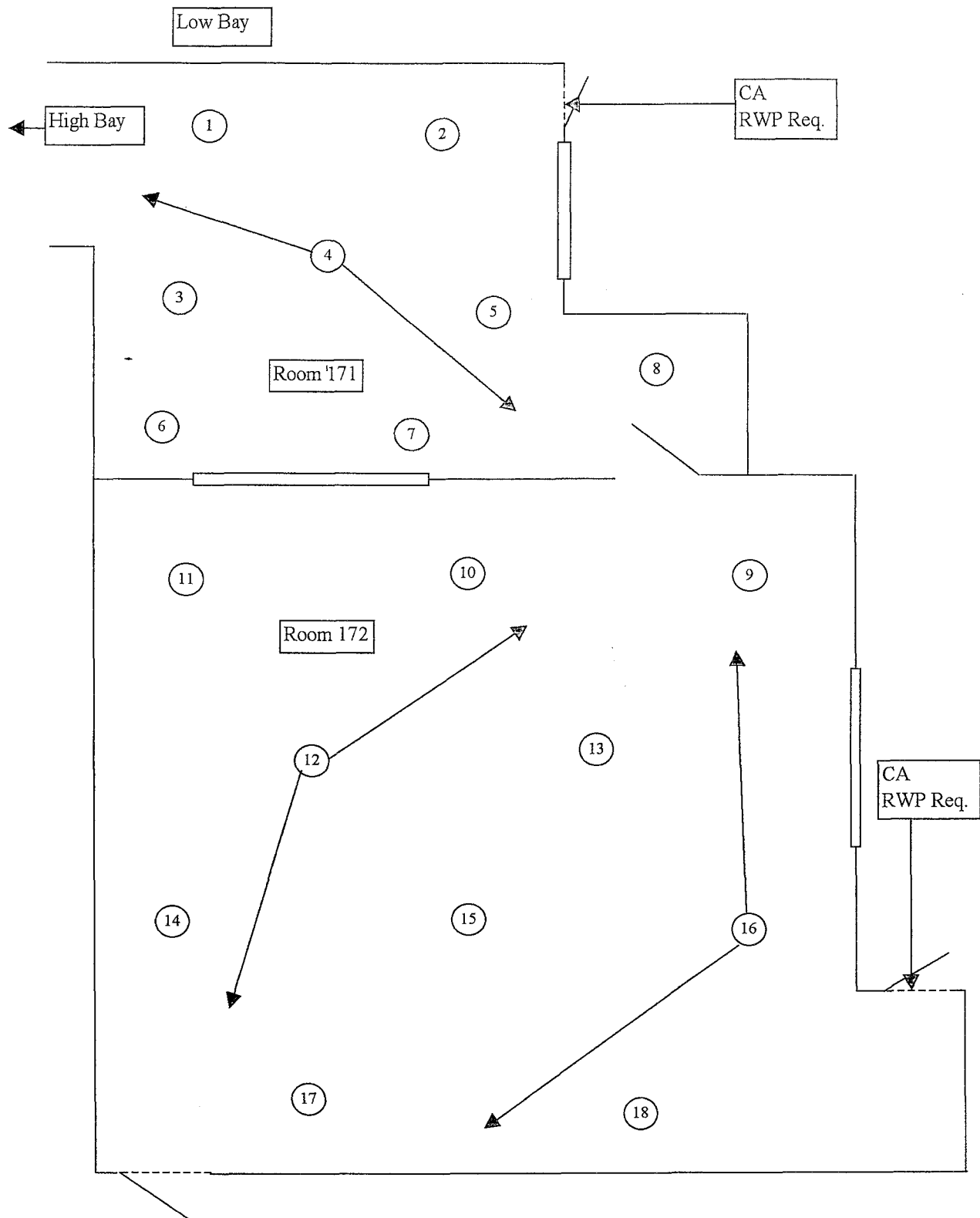
Print Name

Signature

Emp. #

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## Drawing Showing Survey Points



# **ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

## **INSTRUMENT DATA**

Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>	<b>Survey type:</b> Alpha, beta Contamination
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>	Building: <u>865</u>
Serial # <u>176082</u>	Serial # <u>176102</u>	Serial # <u>3247</u>	Location: <u>High bay (various locations)</u>
Cal Due <u>6-11-03</u>	Cal Due <u>6-9-03</u>	Cal Due <u>5-13-03</u>	Purpose: <u>Weekly contamination area routine</u>
Bkg. <u>0.2 cpm α</u>	Bkg. <u>0.1 cpm α</u>	Bkg. <u>1 cpm α</u>	RWP #: <u>03-865-001</u>
Efficiency <u>35.5 %</u>	Efficiency <u>35.5 %</u>	Efficiency <u>21.7 %</u>	Date: <u>4-17-03</u> Time: <u>0915</u>
MDA <u>18 dpm α</u>	MDA <u>18 dpm α</u>	MDA <u>34 dpm α</u>	<div style="background-color: black; width: 100px; height: 20px;"></div>
Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>	Print name _____ Signature _____ Emp. # _____
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>	
Serial # <u>176082</u>	Serial # <u>176102</u>	Serial # <u>3247</u>	
Cal Due <u>6-11-03</u>	Cal Due <u>6-9-03</u>	Cal Due <u>5-13-03</u>	
Bkg. <u>79.6 cpm β</u>	Bkg. <u>71.2 cpm β</u>	Bkg. <u>533 cpm β</u>	RCT: <u>N/A</u> / <u>N/A</u> / <u>N/A</u>
Efficiency <u>38.6 %</u>	Efficiency <u>41.4 %</u>	Efficiency <u>32.2 %</u>	Print name _____ Signature _____ Emp. # _____
MDA <u>205 dpm β</u>	MDA <u>205 dpm β</u>	MDA <u>342 dpm β</u>	

PRN/REN # : N/A

Comments Isotope of concern is depleted uranium (U-238).

## **SURVEY RESULTS**

Swipe #	LOCATION/DESCRIPTION	<b><u>ALPHA</u></b>			<b><u>BETA</u></b>		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe	dpm/100cm <sup>2</sup>	dpm/100cm <sup>2</sup>	dpm/wipe
1	Floor	<18	N/A	N/A	<205	N/A	N/A
2	Floor	<18	N/A	N/A	<205	N/A	N/A
3	Floor	<18	N/A	<34	<205	N/A	<342
4	Floor	<18	N/A	N/A	<205	N/A	N/A
5	Floor	<18	N/A	N/A	<205	N/A	N/A
6	Floor	<18	N/A	<34	<205	N/A	<342
7	Floor	<18	N/A	N/A	<205	N/A	N/A
8	Mezzanine floor	<18	N/A	N/A	<205	N/A	N/A
9	Mezzanine floor	<18	N/A	<34	<205	N/A	<342
10	Mezzanine floor	<18	N/A	N/A	<205	N/A	N/A
11	Mezzanine floor	<18	N/A	N/A	<205	N/A	N/A
12	Mezzanine floor	<18	N/A	N/A	<205	N/A	N/A
13	Mezzanine floor	<18	N/A	N/A	<205	N/A	N/A
14	Mezzanine floor	<18	N/A	N/A	<205	N/A	N/A
15	Floor	<18	N/A	N/A	<205	N/A	N/A
16	Floor	<18	N/A	N/A	<205	N/A	N/A
17	Floor	<18	N/A	<34	<205	N/A	<342
18	Floor	<18	N/A	N/A	<205	N/A	N/A
19	Floor	<18	N/A	N/A	<205	N/A	N/A
20	Floor	<18	N/A	N/A	<205	N/A	N/A

Date Reviewed: 4/17/03 RS Super

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## SURVEY RESULTS

Swipe #	LOCATION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
21	Floor	<18	N/A	<34	<205	N/A	<342
22	Floor	<18	N/A	N/A	<205	N/A	N/A
23	Floor	<18	N/A	N/A	<205	N/A	N/A
24	Floor	<18	N/A	<34	<205	N/A	<342
25	Floor	<18	N/A	N/A	<205	N/A	N/A
26	Floor	<18	N/A	N/A	<205	N/A	N/A
27	Floor	<18	N/A	N/A	<205	N/A	N/A
28	Floor	<18	N/A	N/A	<205	N/A	N/A
29	Floor	<18	N/A	N/A	<205	N/A	N/A
30	N/A	N/A	N/A	N/A	N/A	N/A	N/A
31							
32							
33							
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58							
59							
60							
61							
62							
63	N/A	N/A	N/A	N/A	N/A	N/A	N/A

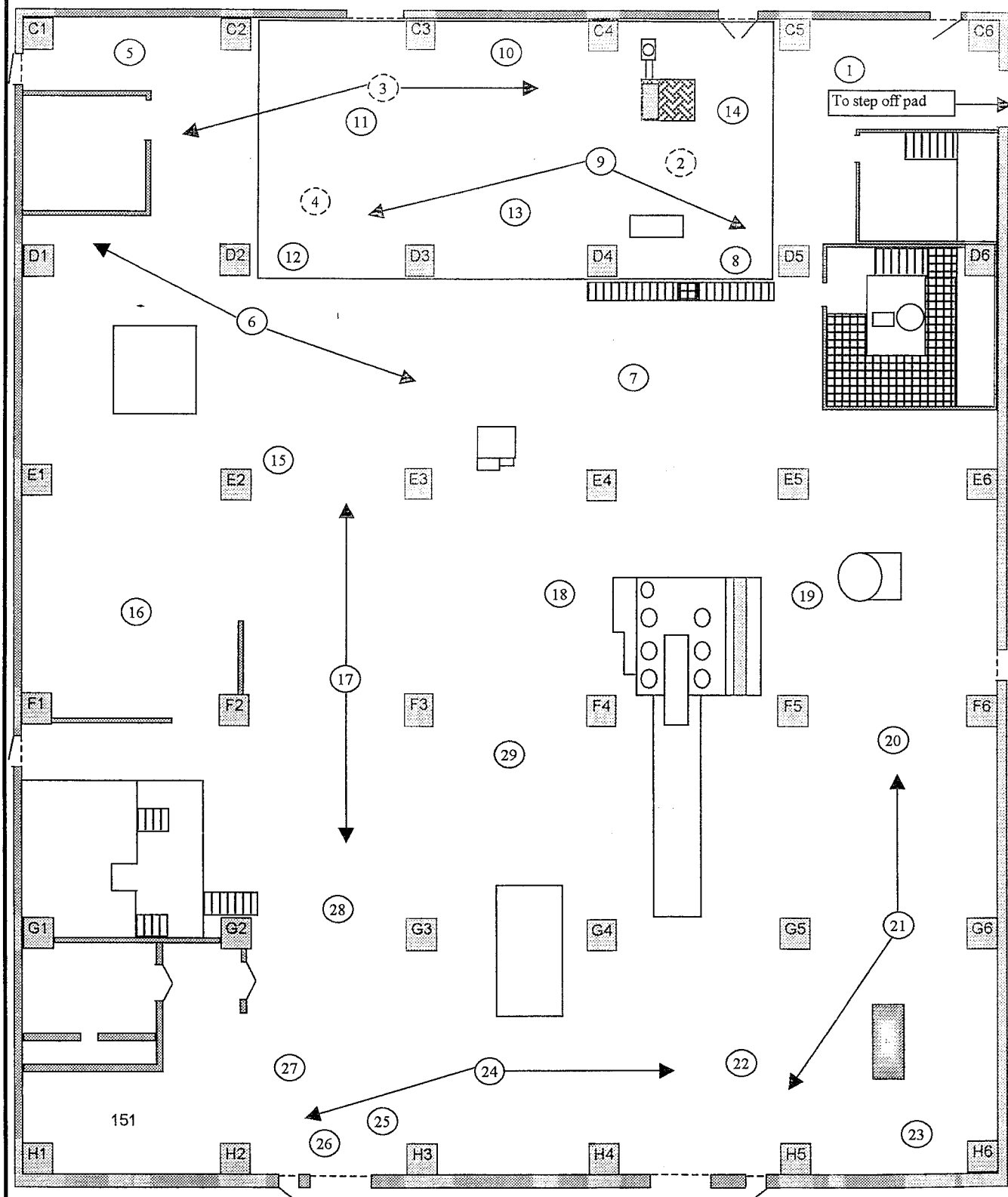
191

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## Drawing Showing Survey Points

----- Denotes CA boundary

○ Denotes smear locations beneath mezzanine



# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>
Serial # <u>176102</u>	Serial # <u>176082</u>	Serial # <u>3248</u>
Cal Due <u>6/9/03</u>	Cal Due <u>6/11/03</u>	Cal Due <u>7/9/03</u>
Bkg. <u>0.7 cpm α</u>	Bkg. <u>0.2 cpm α</u>	Bkg. <u>4 cpm α</u>
Efficiency <u>34.4 %</u>	Efficiency <u>35.5 %</u>	Efficiency <u>21.4 %</u>
MDA <u>18 dpm α</u>	MDA <u>18 dpm α</u>	MDA <u>57 dpm α</u>

Survey type: Contamination

Building: 865

Location: High Bay

Purpose: Weekly Routine (865-2W-CA)

RWP #: 03-865-001

Date: 4/8/03 Time: 8:30 AM

Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>
Serial # <u>176102</u>	Serial # <u>176082</u>	Serial # <u>3248</u>
Cal Due <u>6/9/03</u>	Cal Due <u>6/11/03</u>	Cal Due <u>7/9/03</u>
Bkg. <u>70.4 cpm β</u>	Bkg. <u>82.1 cpm β</u>	Bkg. <u>472 cpm β</u>
Efficiency <u>40.8 %</u>	Efficiency <u>38.6 %</u>	Efficiency <u>30.1 %</u>
MDA <u>205 dpm α</u>	MDA <u>205 dpm α</u>	MDA <u>345 dpm β</u>

RCT: [REDACTED]

RCT: N/A / N/A / N/A  
 Print name                      Signature                      Emp. #

PRN/REN # : N/A

Comments N/A

## SURVEY RESULTS

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	FLOOR	<18	NA	NA	<205	NA	NA
2	FLOOR	<18	NA	NA	<205	NA	NA
3	FLOOR	<18	NA	NA	<205	NA	NA
4	FLOOR	<18	NA	NA	<205	NA	NA
5	FLOOR	<18	NA	NA	<205	NA	NA
6	FLOOR	<18	NA	NA	<205	NA	NA
7	FLOOR	<18	NA	NA	<205	NA	NA
8	FLOOR	<18	NA	NA	<205	NA	NA
9	FLOOR	<18	NA	NA	<205	NA	NA
10	FLOOR	<18	NA	NA	<205	NA	NA
11	FLOOR	<18	NA	NA	<205	NA	NA
12	FLOOR	<18	NA	NA	<205	NA	NA
13	FLOOR	<18	NA	NA	<205	NA	NA
14	FLOOR	<18	NA	NA	<205	NA	NA
15	FLOOR	<18	NA	NA	<205	NA	NA
16	FLOOR	<18	NA	NA	<205	NA	NA
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19	FLOOR	<18	NA	NA	<205	NA	NA
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Date Reviewed: 4/8/03 RS Supervision: [REDACTED]

Print Name

Signature

Emp. #

193

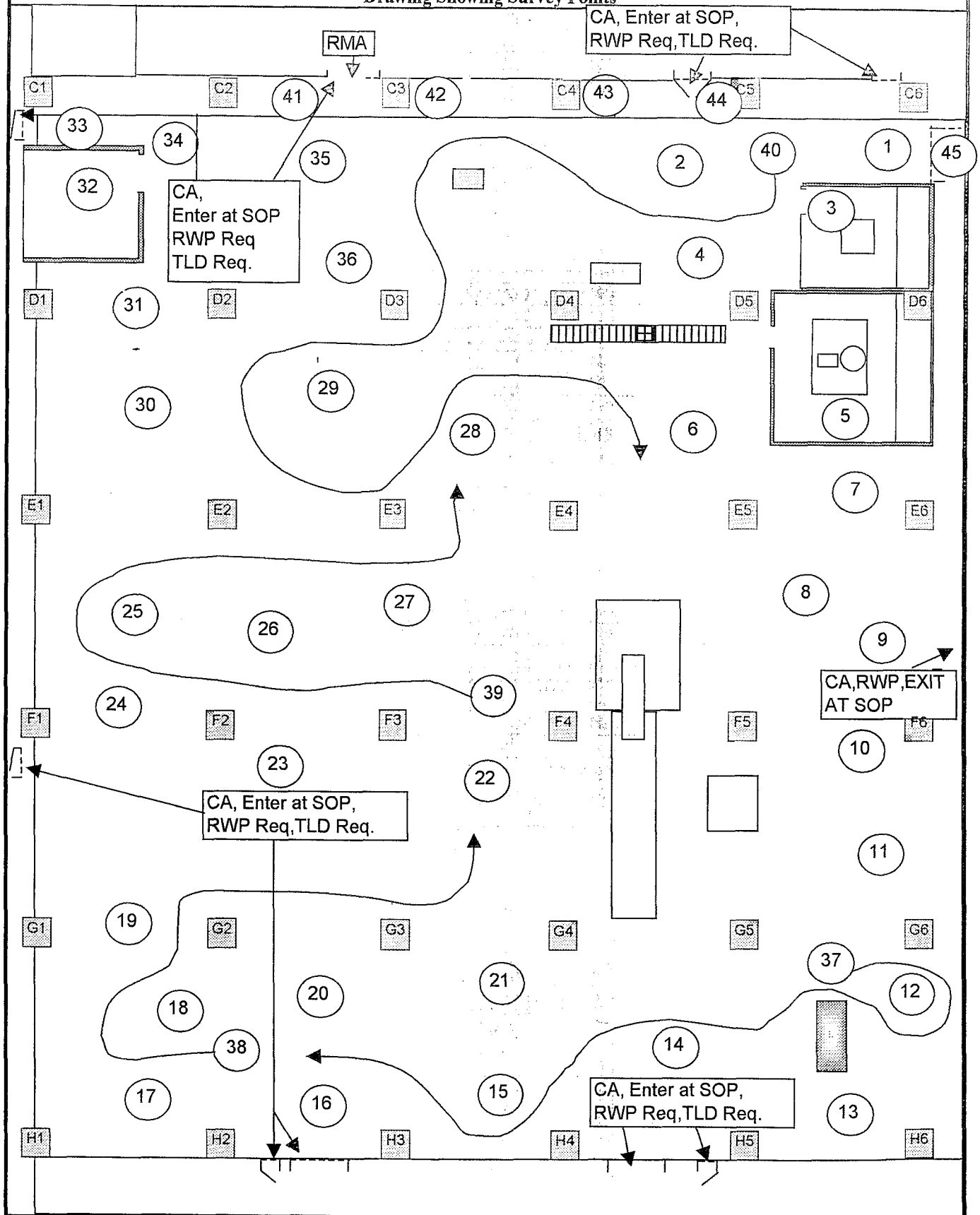
# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## SURVEY RESULTS

[illegible]

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Drawing Showing Survey Points



195

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## INSTRUMENT DATA

Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>	Survey type: <u>Contamination</u>
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>	Building: <u>865</u>
Serial # <u>176102</u>	Serial # <u>176082</u>	Serial # <u>3124</u>	Location: <u>HIGH BAY</u>
Cal Due <u>6/9/03</u>	Cal Due <u>6/11/03</u>	Cal Due <u>9/24/03</u>	Purpose: <u>WEEKLY ROUTINE (865-2W-CA)</u>
Bkg. <u>0.5 cpm α</u>	Bkg. <u>0.1 cpm α</u>	Bkg. <u>2 cpm α</u>	RWP #: <u>03-865-001</u>
Efficiency <u>34.4 %</u>	Efficiency <u>35.5 %</u>	Efficiency <u>21.5 %</u>	Date: <u>4/1/03</u> Time: <u>10:00</u>
MDA <u>18 dpm α</u>	MDA <u>18 dpm α</u>	MDA <u>44 dpm α</u>	[REDACTED]
Mfg. <u>Ludlum</u>	Mfg. <u>Ludlum</u>	Mfg. <u>NE Electra</u>	
Model <u>2929</u>	Model <u>2929</u>	Model <u>DP-6</u>	RCT: <u>N/A</u> / <u>N/A</u> / <u>N/A</u>
Serial # <u>176102</u>	Serial # <u>176082</u>	Serial # <u>3124</u>	Print name _____ Signature _____ Emp. # _____
Cal Due <u>6/9/03</u>	Cal Due <u>6/11/03</u>	Cal Due <u>9/24/03</u>	
Bkg. <u>68.5 cpm β</u>	Bkg. <u>81.9 cpm β</u>	Bkg. <u>538 cpm β</u>	
Efficiency <u>40.8 %</u>	Efficiency <u>38.6 %</u>	Efficiency <u>30.8 %</u>	
MDA <u>205 dpm α</u>	MDA <u>205 dpm α</u>	MDA <u>359 dpm β</u>	

PRN/REN # : N/A

Comments N/A

## SURVEY RESULTS

Swipe #	LOCATION/DESCRIPTION	ALPHA			BETA		
		Swipe	Direct	Wipe	Swipe	Direct	Wipe
		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	FLOOR	<18	NA	NA	<205	NA	NA
2	FLOOR	<18	NA	NA	<205	NA	NA
3	FLOOR	<18	NA	NA	<205	NA	NA
4	FLOOR	<18	NA	NA	<205	NA	NA
5	FLOOR	<18	NA	NA	<205	NA	NA
6	FLOOR	<18	NA	NA	<205	NA	NA
7	FLOOR	<18	NA	NA	<205	NA	NA
8	FLOOR	<18	NA	NA	<205	NA	NA
9	FLOOR	<18	NA	NA	<205	NA	NA
10	FLOOR	<18	NA	NA	<205	NA	NA
11	FLOOR	<18	NA	NA	<205	NA	NA
12	FLOOR	<18	NA	NA	<205	NA	NA
13	FLOOR	<18	NA	NA	<205	NA	NA
14	FLOOR	<18	NA	NA	<205	NA	NA
15	FLOOR	<18	NA	NA	<205	NA	NA
16	FLOOR	<18	NA	NA	<205	NA	NA
17	FLOOR	<18	NA	NA	<205	NA	NA
18	FLOOR	<18	NA	NA	<205	NA	NA
19	FLOOR	<18	NA	NA	<205	NA	NA
20	FLOOR	<18	NA	NA	<205	NA	NA

Date Reviewed: 4/1/03 RS Supervision \_\_\_\_\_

196

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

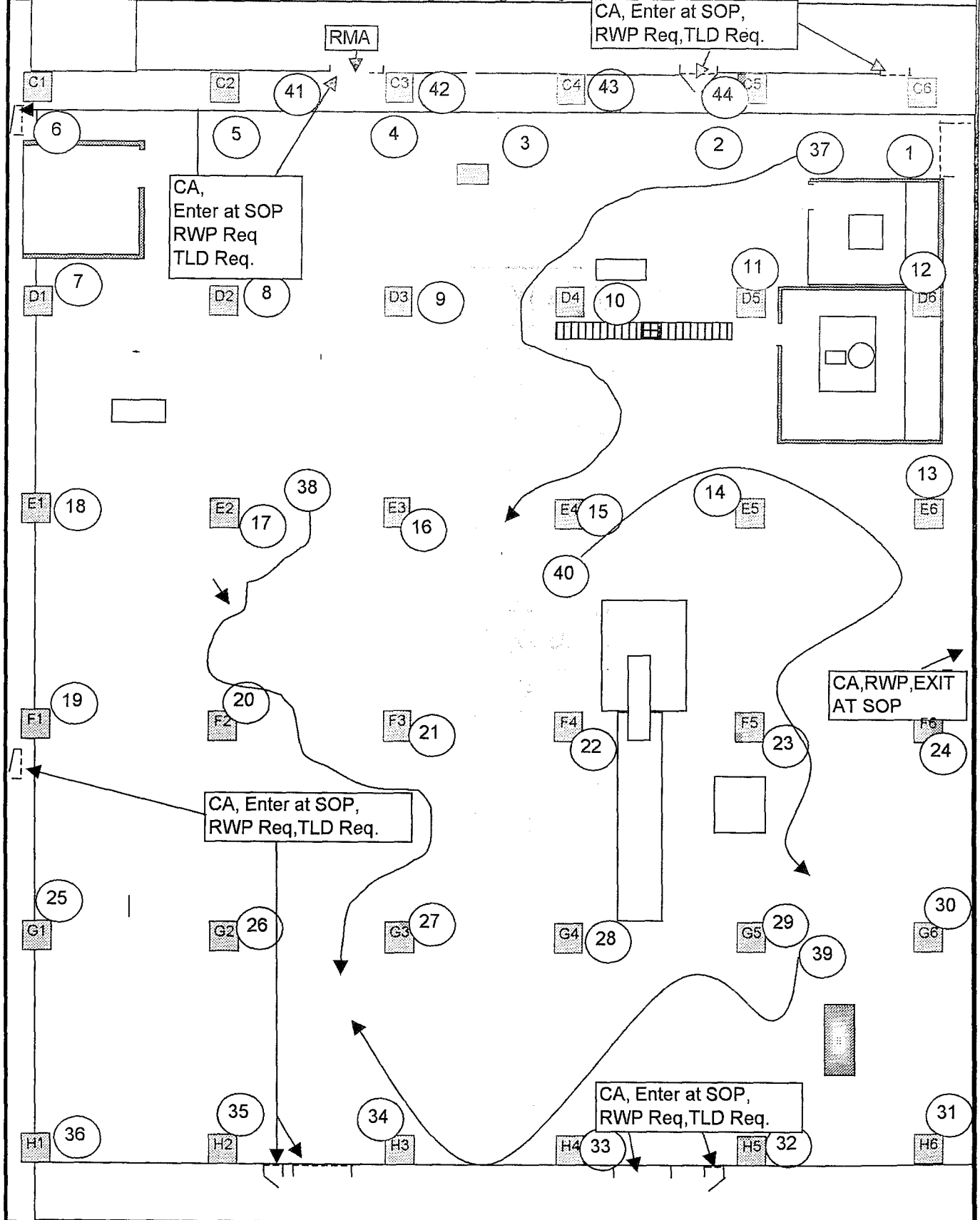
## SURVEY RESULTS

[illegible]

197

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Drawing Showing Survey Points



198

## ATTACHMENT G

### 865 High Bay Radiological Slab Core Data

200

# Bldg. 865 High Bay

## Cement Floor Core Sample Gamma Spectroscopy Data

Site Sample ID#	Isotope Am-241 pCi/gm	Isotopes U238/234 pCi/gm	Isotope U-235 pCi/gm	Sample Weight grams	Bldg. 865 Grid	Comments
03S0175-						
001.002	0	6.0	0.45	25	1	See Notes on Page 2
002.002	0	2.5	0.22	26	2	"
003.002	0	2.8	0.75	29	3	"
004.002	0	1.3	0.42	24	4	"
005.002	0	7.7	0.27	25	5	"
006.002	0	3.2	0.53	25	6	"
007.002	0	4.6	0.00	35	7	"
008.002	0	4.6	0.33	30	8	"
009.002	0	1.6	0.42	33	9	"
010.002	0	2.2	0.33	25	10	"
011.002	0	2.2	0.29	31	11	"
012.002	0	2.9	0.38	34	12	"
013.002	0	2.5	0.00	31	13	"
014.002	0	2.1	0.42	22	14	"
015.002	0	0.0	0.36	29	15	"
016.002	0	0.0	0.27	33	16	"
017.002	0	0.0	0.38	36	17	"
018.002	0	0.0	0.00	26	18	"
019.002	0	0.0	0.40	38	19	"
020.002	0	2.2	0.32	33	20	"
021.002	0	0.0	0.27	39	21	"
022.002	0	0.0	0.38	30	22	"
023.002	0	0.0	0.00	26	23	"
024.002	0	1.7	0.30	23	24	"
025.002	0	1.7	0.34	23	5	"
026.002	0	2.3	0.00	25	25	"
Average	0	2.08	0.30	29.0		
Maximum	0	7.7	0.7	38.8		

# Bldg. 865 High Bay

## Cement Floor Core Sample Gamma Spectroscopy Data

Notes	
1	Per discussion with R. Boyle, x6575 (Site Sample Team, 1" cores were drilled in 26 locations of the Bldg. 865 floor, as shown on the map. The RIN # was 03S0175.
2	The slab thickness varied from 6" in the south corners to 9 1/2" in the NW corner.
3	The 1" cores were split with the top 1.5 - 2" going to gamma spectroscopy for 1 hr counts & bottom portions used for chemical analysis (metals, PCBs, VOAs, etc.).
4	Before core drilling, locations were wiped down to remove excess removable Beryllium & Uranium contaminants, leaving only fixed contamination in the top zone of the core sample.
5	All Am-241 values recorded were "0.00", with typical MDAs in the 0.35 pCi/gm range. This means that there were no indications of Am-241/WgPu above the MDA for any of the 26 core samples.
6	The overall results of the core samples indicates <b>very low</b> concentrations of Uranium in the top region of the slab. With such low Uranium concentrations, the destruction & removal of the floor slab with heavy equipment should cause minimal or no remediation of the soil underneath due to minor low level residual contamination dispersed during slab removal efforts.

## ATTACHMENT H

### 980 Pad InstaCote Demolition Test White Paper

## Building 865 Closure Project

### 980 Pad InstaCote SE Demolition Test

#### White Paper

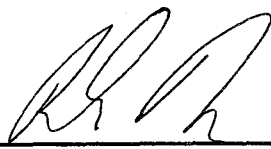


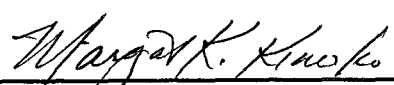
Prepared By


Rock Neveau, RISS Radiological Engineering

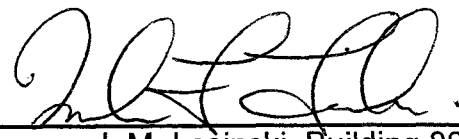
May 29, 2003

## Preparation, Review, and Concurrence

 6-9-03  
Prepared By Rock Neveau, RISS Radiological Engineering // Date

 6/9/03  
Reviewed By Margaret Kimokeo, RISS Engineering // Date

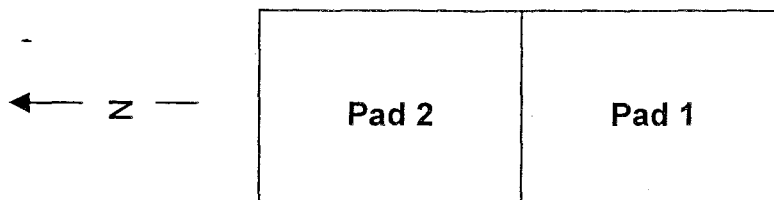
 6/11/03  
Concurrence, Curtis Bean, RISS Radiological Safety Manager // Date

 6/16/03  
Approval, M. Lesinski, Building 865 Project Manager // Date

## Executive Summary

A small-scale demolition test was conducted at the 980 Rubble Pile Area slab to assess InstaCote SE polyurea coating as an alternative material to protecting the slab of B865 during the proposed demolition activities.

The test slab area was divided into two sections (Pad 1 and Pad 2). Pad 1 had multiple layers of product (pink powder, CC Fix, and a top coat of InstaCote SE). Pad 2 had a single layer of InstaCote SE sprayed directly onto the clean slab.



(980 Test Pads – Top View)

The test consisted of several phases conducted in the following order:

1. Very large concrete (with re-bar & conduit encased) re-bar sections were elevated high above Pad 1 and Pad 2 (approximately 15 – 20 feet) and dropped directly onto the pads.
2. Bucket loads of debris were then dumped aggressively onto the remaining areas of both pads to produce approximately 3 feet of concrete rubble.
3. Large pieces of concrete were size reduced using the track-mounted processor over the pads.
4. The track mounted processor was driven back-and-forth over the remaining 3 feet of rubble (both pads).
5. The track-mounted processor was driven onto the center of the remaining rubble and articulated (turned) both clockwise and counter-clockwise.
6. The rubble was removed using a rubber-tired backhoe.
7. The track-mounted processor was driven over the entire surface of the remaining InstaCote SE polyurea coating pad and articulated.

The condition of both pads was inspected between each step listed above.

The overall findings of the test are summarized below.

- Pad 1 and Pad 2 coatings protected the underlying slab from the drop test. No pink powder was observed on the materials that were dropped onto Pad 1.
- Pad 1 (multiple coatings pad) experienced peeling and lifting of the black InstaCote SE top-coat during size reduction activities of the rubble. The underlying coating of CC Fix was also brought up attached to the InstaCote SE top layer.
- No concrete was brought up or compromised in any manner from the lifting of the InstaCote. The InstaCote SE (and fixative/pink-powder layer at Pad 1) peeled smoothly away from the concrete and did not disturb or damage the concrete slab in any manner.
- The InstaCote SE on Pad 2 remained intact during all activities – including the stage where the track-mounted processor drove directly onto Pad 2 and articulated (or turned) on the pad.

The goal of the test was to determine if InstaCote SE polyurea coating and/or a combination of CC Fix topped with InstaCote SE polyurea coating was a viable material for protecting B865 slab during the proposed demolition activities. Although the coatings on Pad 1 were peeled away during size reduction and removal of rubble, the underlying slab remained intact and undamaged.

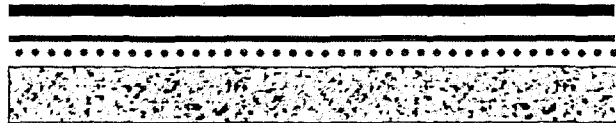
However, test results showed that the initial coating of CC Fix is unnecessary, since it seemed to prevent a strong bond to the underlying concrete slab (as was seen in Pad 1). The application of InstaCote SE directly onto the concrete surface (as in Pad 2) provided the best protection of the underlying concrete slab – even when the track-mounted processor drove directly onto its surface.

**The B865 Demolition Project proposes the use of InstaCote SE be sprayed directly onto the floor of B865 to protect the slab during demolition and removal of the walls and ceilings of the facility.**

## Test Preparation

A section of the remaining exposed slab at the 980 rubble pile was swept clean and divided into two distinct sections. The slabs were prepared in the following manner:

- An area of approximately 40-ft x 20-ft was cleared of all rubble and swept of all remaining dirt and debris.
- Two test pad areas were established – Pad 1 and Pad 2
  - **Pad 1** – a bright pink fluorescent powder was spread over the surface of the concrete, followed by a layer of CC Fix (blue-dyed fixative). Fixative was cured to required hardness. A final coating (1/4-inch minimum thickness) of Instacote SE polyurea was applied.



Pad 1

- **Pad 2** – remained clean. No powder was placed on Pad 2 due to concerns that the high pressure spray gun used to apply InstaCote SE would spread and re-suspend pink powder over entire jobsite.



Pad 2

- InstaCote SE (black) polyurea was sprayed to a minimum thickness of 1/4 inch over the entire surface area of both test pads and allowed to cure. The InstaCote SE remained exposed to the elements for four days (over the Memorial Day weekend).
- Test Pad 1 and Pad 2 were visually inspected on May 27, 2003 and determined to be ready for the proposed test.

**Test Goal:** The goal of the test was to determine if InstaCote SE polyurea coating and/or a combination of CC Fix topped with InstaCote SE polyurea coating was a viable material for protecting B865 slab during the proposed demolition activities.

The test was performed under the RFETS Craft Work Package T0110774 - 565. Each stage of the test was photographed and videotaped.

## Test Activities & Results

A test agenda was created to document and guide all participants. The agenda had sign-off boxes for each major step and is included in the associated work control document (T0110774 —565).

Heavy equipment similar to what will be used for the demolition of B865 was brought to the 980 Pad Area. Equipment included a large, track-mounted processor and a rubber-tired backhoe with front-end bucket.

Each major step of the test and the corresponding results will be documented as follows.

### Step One: Drop Test

The large track-mounted processor was used to lift very large blocks of rubble approximately 15 – 20 feet above the slab. (See Figure 1) Two large chunks were dropped onto Pad 1 and two large chunks were dropped onto Pad 2. Both Pads were inspected immediately after the four objects were dropped.



Figure 1. Track-Mounted Processor Dropping Large Rubble Onto Test Pads

## RESULTS

From the four large objects that were dropped onto the test pads, 3 tears in the coating were observed. Pad 1 experienced one large tear from the dropping of a rubble piece that contained two pipe protrusions. The underlying slab experienced a small dent. (See Figure 2) Pad 2 experienced two smaller tears from each object that was dropped. In both instances the underlying slab was of Pad 2 was not chipped or damaged. (See Figure 3)



**Figure 2. Pad 1 Results from Drop Test - Small Dent in Underlying Slab**



**Figure 3 Results from Pad 2 Drop Test - No Damage to Slab**

## Step Two: Size-Reduction and Removal

The rubber tired backhoe was used to collect material from the existing rubble pile and dump materials directly onto Pads 1 and 2. Equipment operators were instructed to dump materials as aggressively as possible – lifting each bucket high and dumping the material directly onto the pads. (See Figure 4)



**Figure 4. Dumping Rubble on the Test Pads**

Once the slab was coated to a level of approximately three feet of rubble, the larger chunks that were previously dropped onto the slab in the “drop test” phase were aggressively size reduced over the areas of the pad where it was dropped. Final size activities of this phase of testing involved the removal of the top layer (approximately two feet) of rubble, leaving 12 – 18 inches of rubble remaining on both test pads. Equipment operators were instructed to use aggressive picking and scraping motions with the track-mounted processor to remove the top layer of rubble – as is normally performed during the D&D of buildings at RFETS.

## RESULTS

Inspection of Pad 1 and Pad 2 was performed after the aggressive size reduction and removal activities were completed. Pad 1 (south pad) had a large amount of the polyurea topcoat peel up from these activities (approximately 40%). Pad 2 (north pad) had no peeling or damage to the polyurea coating from these activities.

### Step Three: Drive Test

This step involved two main phases. Phase 1 had the track-mounted processor drive directly on top of the rubble pile (heading south to north over both pads). The operator was instructed to drive over the top of the rubble, stop, and back up two times.

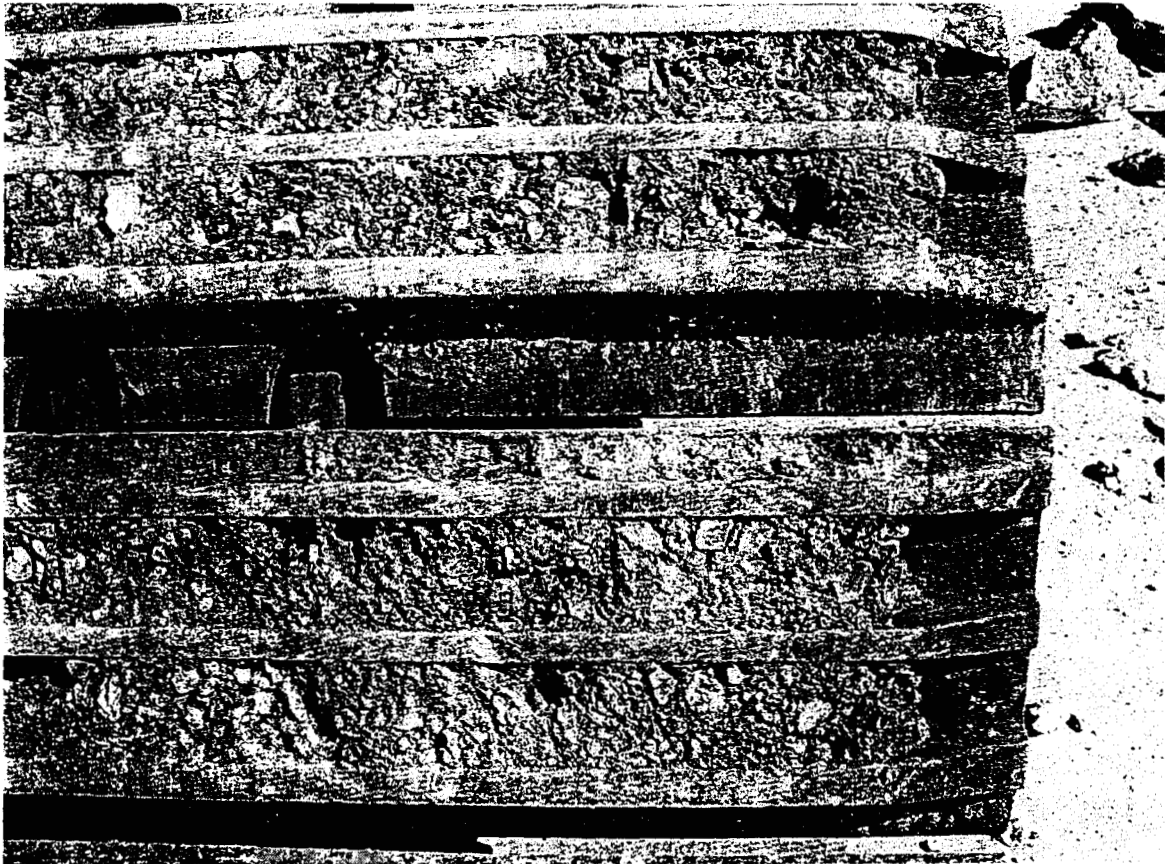


Figure 5. Close-up View of the Treads on the Track-Mounted Processor

### RESULTS

Inspection of Pad 1 and Pd 2 was performed after the operator drove two times over the entire surface area of both pads. No additional damage was observed on either pad from these activities.

#### Step Four: Articulation (Turning) Test

This step required the operator of the track-mounted processor to drive directly on top of the center of the rubble pile and articulate the tracks of the equipment directly on top of the remaining rubble pile. The operator drove from south to north onto the pads, then turned east. After the east-turn, the operator turned the equipment west 270 degrees until the tracks were facing directly south. The operator then drove the track-mounted processor directly off the test pad area, heading south.

#### RESULTS

Inspection of Pad 1 and Pad 2 was performed after the operator drove off of the test pad area. The coating on Pad 1 was almost completely pulled (or peeled) off of the test pad area during this test (90% damage compared to initial total coverage). Pad 2 fared better. Although the rubble blocked total inspection of Pad 2, it appeared to be in tact.



Figure 6. Pad 1 After the Drive and Articulation Phase of Testing - Note Buckling of Coating

### Step Five: Removal and Inspection

This step involved the removal of all remaining rubble from the entire test pad area (Pads 1 & 2). A rubber-tired backhoe with front loading bucket was used to remove the rubble.

### RESULTS

**PAD 1:** Pad 1 was inspected after removal of the rubble and debris. The entire coating of polyurea and fixative had been peeled up or otherwise compromised. Many sections of the coating were compromised during previous tests (size reduction and articulation of heavy equipment). Removal activities resulted in additional peeling and removal of most of the coating at Pad 1. However, the underlying concrete slab was not significantly damaged or disturbed.



**Figure 7. Pad 1 after Rubble Removal - Most of the Coating Has Been Peeled or Removed from Test Activities**

**PAD 2:** Damage (peeling and/or pulling loose) was observed at the far south end of Pad 2. This was attributed to the large areas that were pulled free from the damage occurring at Pad 1. Recall that the top polyurea coating was sprayed over the entire surface of the pad. What happened on Pad 1 affected the very south end of Pad 2; however, the Pad 2 area held tight at the areas that were not affected by the pulling and peeling that occurred at Pad 1. Pad 2 remained intact and undamaged from all previous test activities in areas that were not affected by Pad 1.



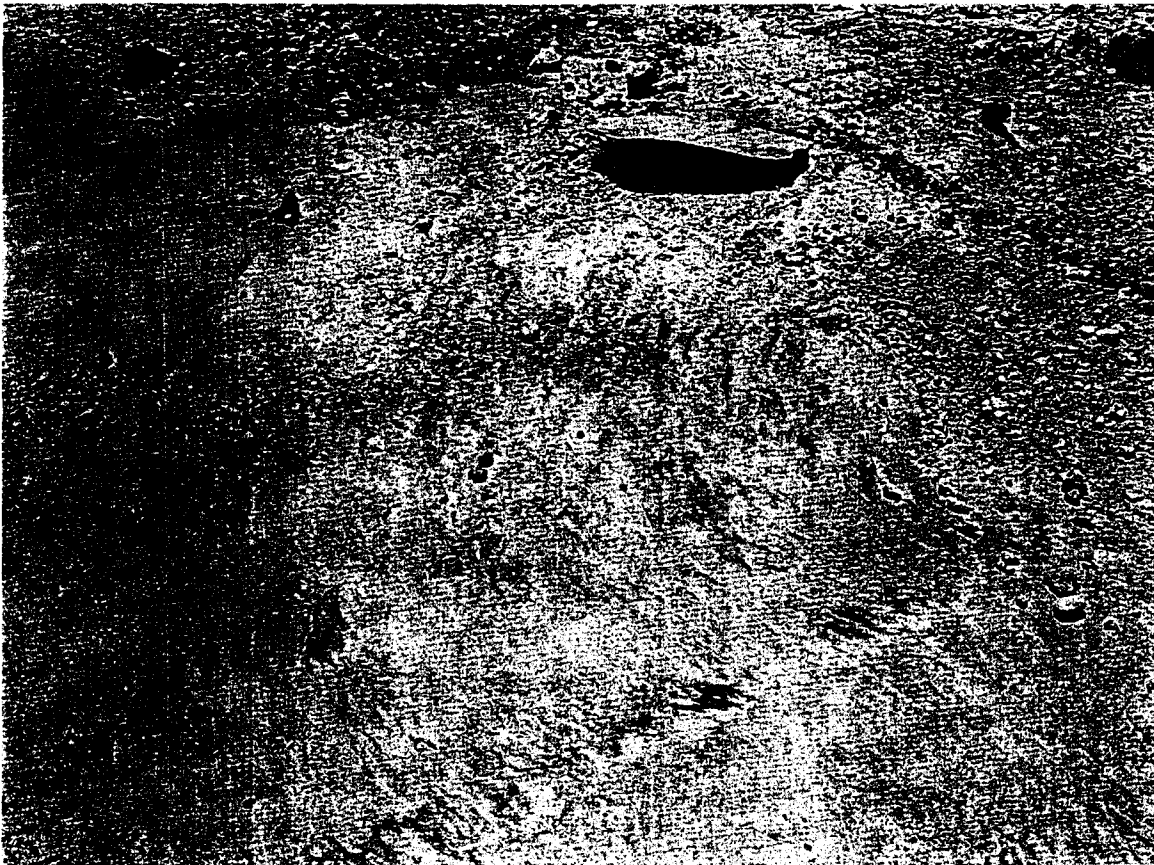
**Figure 8. Pad 2 after Rubble Removal & Sweeping - Inspection Shows Little or No Damage From All Test Activities**

### **Step Six: Drive Test Directly On Polyurea (Instacote SE) Surface**

After the inspection of Pads 1 & 2, the operator was instructed to drive directly onto the remaining polyurea coating (Pad 2, since Pad 1 coating was basically removed from previous test activities). The operator was instructed to drive directly onto the coating on Pad 2 and turn the equipment to the east. The operator then drove off the pad. Later, the track-mounted processor drove back over Pad 2 and exited the 980 Rubble Pile area.

### **RESULTS**

The results of the drive and turn test on the polyurea coating showed little damage to the coating. The top surfaces of the polyurea coating were scuffed and "chewed up" when the equipment turned. However, no cutting or "break through" occurred from this aggressive activity from the tracks of the 110,000-lb piece of equipment.



**Figure 9. Condition of Pad 2 After Track-Mounted Processor performed the Drive/Articulation Test - Note Track Marks With Minor Scuffing**

## Conclusions & Recommendations

The goal of the test was to examine the potential use of spray-applied fixatives and coatings for protection of building slabs during demolition activities. It is important to realize that the coatings were expected to experience some damage (cutting, peeling, etc.) from the extreme forces associated with the demolition of facilities at RFETS. The protection of the underlying slab was the primary focus of this test, not the protection of the surfaces of the topcoat material. The fixative (CC Fix) was applied as an undercoating to provide visual cues to identify failure of the Instacote SE.

The test pad area was divided into two different sections – Pad 1 & Pad 2. Pad 1 had a layer of pink powder, a layer of fixative (CC Fix) and a top layer of polyurea (Instacote SE). Pad 2 had a single layer of polyurea (Instacote SE).

### PAD 1

Pad 1 experienced significant peeling and removal during all activities of the test. The drop test produced a small dent (or “nick”) in the underlying slab. The subsequent phases of testing (size reduction, driving, and articulation of equipment) resulted in almost total removal of the coating. At the end of the testing all rubble was removed, and most of the coating on pad 1 was also removed (90%) at the end of the test. Subject matter experts present at the test site surmise that the additional undercoat of fixative (CC Fix) prevented the topcoat of Instacote SE from firmly adhering to the concrete slab at Pad 1. This allowed for the coating to experience the shifting, buckling, and peeling that occurred from all phases of the test. Approximately 10% of Pad 2 was also removed (or peeled up) from the buckling and peeling associated with Pad 1.

Inspection of the Pad 1 showed little if any damage to the underlying slab from all test activities, with the exception of the small dent that occurred from the drop test.

### PAD 2

Pad 2 experienced little if any damage to the Instacote SE polyurea coating. All test activities produced very little peeling or damage to the single layer of Instacote SE, including the final phase of testing which involved the 110,000 lb., track-mounted equipment driving directly onto the surface and articulating. The top surfaces were “chewed up”, but no breakthrough occurred.

It was demonstrated during this test that failure of the Instacote SE was readily observable by the equipment operator. Colored paint or bright-colored fixatives are not required as an undercoat to provide the operator with visual cues on the failure of the Instacote SE.

Inspection of Pad 2 showed no damage to the underlying slab from the areas that were removed after the testing was complete. A small section of the polyurea coating was left behind on the north section of Pad 2 to allow for additional inspection of the state of the coating for personnel who were not able to attend the test.

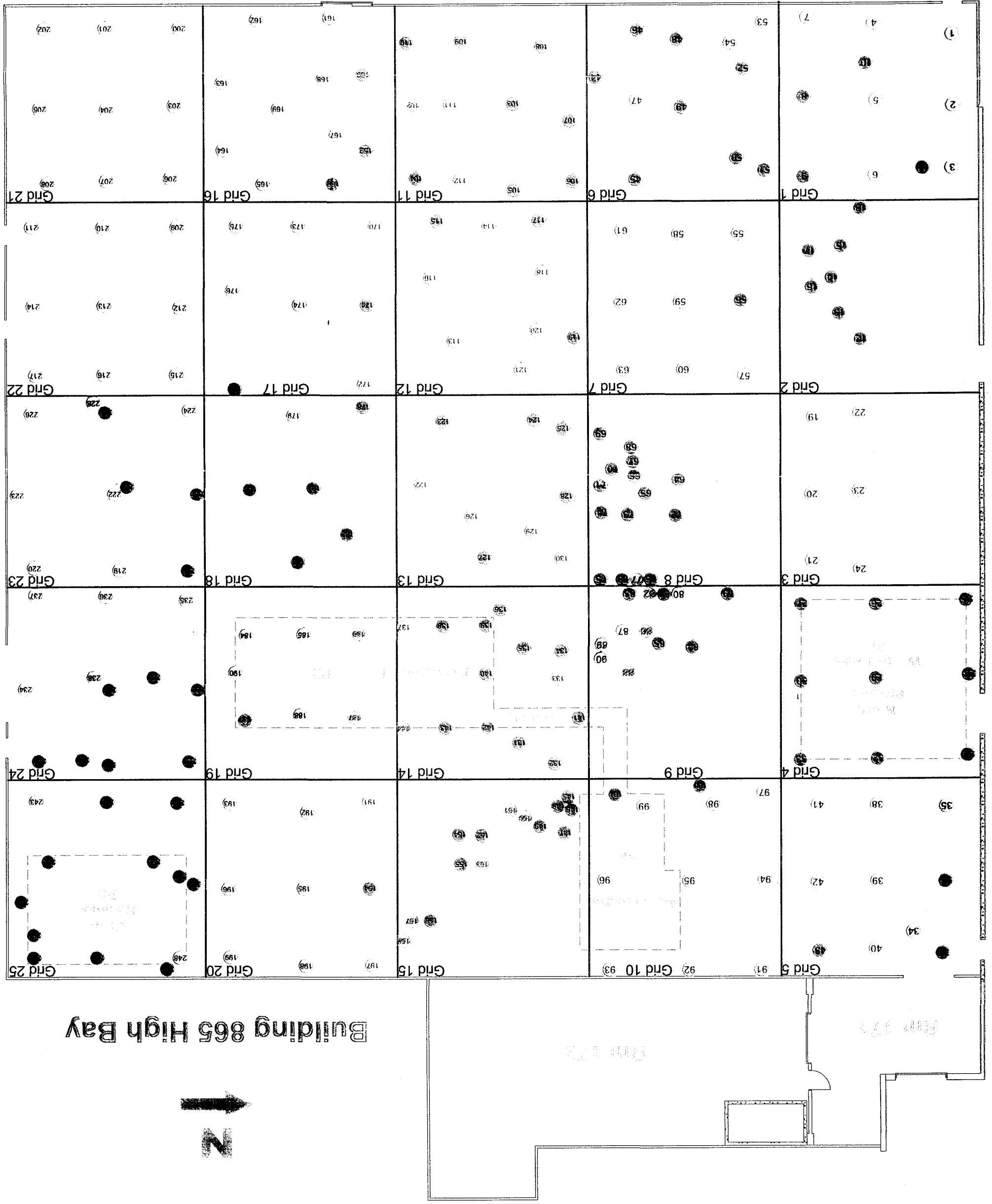
#### RECOMMENDATIONS

A spray applied coating offer advantages over traditional covering materials, such as steel plating. Worker safety is the foremost advantage, since steel pieces will not be cut and riveted into place for each section of floor. Attaching the plates to contaminated flooring present contamination control issues (PPE, respirators, localized ventilation controls, etc.) and worker exposures. These issues do not exist when using spray-applied coatings to protect the slab of a facility during demolition. The material can be sprayed onto all flooring in less time with a significant reduction in risk for worker injury and exposures to hazardous materials in the slab.

The Building 865 Closure Project recommends the use of a spray-applied, single layer of Instacote SE for protection of the slab during demolition activities. The coating should be a minimum thickness of ¼ inch and applied over all slab surfaces that present contamination concerns during the proposed methods of demolition.

## ATTACHMENT I

### 865 Building Slab Thickness Drawing

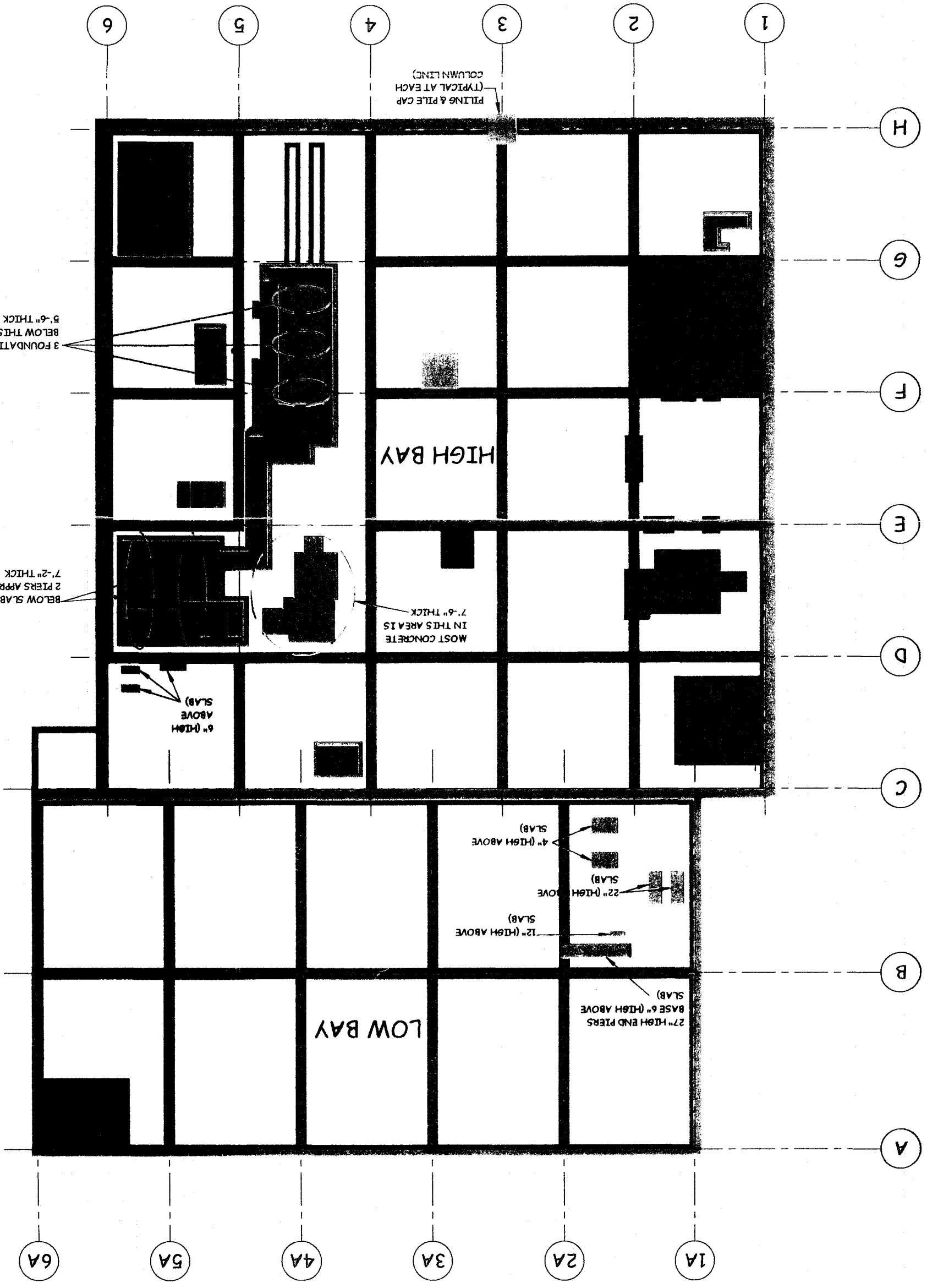


LEGEND  
(dpm/100 cm<sup>2</sup>)  
> 5,000  
5,000 - 100,000  
101,000 - 200,000  
201,000 - 500,000  
> 500,000

Building 865 High Bay

219/12/9  
Best Available Copy

VARIOUS SLAB THICKNESS  
FOR BUILDING 865



**LEGEND:**

- SLAB 6" THICK
- 6" TO 18" THICK
- 18" TO 36" THICK
- ABOVE 36"
- ABOVE SLAB FOUNDATION
- PILES DEPTH (7.5' - 26')  
PILE CAP 2.5' THICK

Neither the United States Government, nor Kaiser Hill Co., nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

**NOT TO SCALE**

**CH2M HILL**  
Communications Group

Prepared by: GIS Dept. 303-966-7707

MAP ID: 03-0096slab.thick

U.S. Department of Energy  
Rocky Flats Environmental Technology Site

May 1, 2003